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PROBLEMS IN BANKING, MONEY AND CREDIT

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PREFACE

This volume presents, for use in university and college courses in banking, money, and credit, a wide selection of problems illustrating the whole range of these related subjects. The authors believe that the body of materials here collected and carefully arranged will aid the student at every step of his work, helping to build up for him a theoretical background; presenting the legal and historical aspects of the development of banking in various countries, more especially our own; acquainting him with points of present-day practice; and showing in outline the relations of money, banking and credit to the general field of economics. The volume will be found useful also, it is believed, in the training courses offered in financial institutions and other corporation schools.

A large proportion of the problems here selected deal with present-day conditions, but to give proper perspective there have been included a large number showing the genesis of our current system and practice. In both types stress has been laid upon fundamental principles. Materials have been freely taken from government reports and other well-recognized sources of information. The problems which represent actual cases have come under the observation of the authors or have been obtained directly from banking or business houses. Descriptive data have been given whenever it was felt that such information would illustrate principles, challenge thought, encourage discussion, or stimulate the student's interest in his work.

The authors have endeavored to include material on each of the subdivisions usually covered by textbooks in the field. They have not, however, sought to follow the outline used in any specific book or course, but rather to present the data in what appeared to be the most logical arrangement in view of the diversity of order and emphasis in different college and university courses. The problems have been so constructed and arranged as to make it possible for instructors to shift the order or to omit entirely specific types to suit the special needs of their classes. Whether

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the instructor's chief interest lies in the theoretical or the practical aspects of the subject, he will find an ample supply of problems suitable for his particular purpose. For the convenience of classroom use and assignment, the problems have been numbered consecutively through Chapters II to XXVII. Chapter XXVIII assembles in concise form various tables and other collections of data for use in the study of the problems and collateral investigations.

The bringing together of this large body of materials should result in a distinct saving of time for instructors and students alike. The teacher finds it always difficult and often impossible to assemble from the library or private sources material and problems to illustrate adequately his courses in the subjects here covered, particularly as regards recent affairs and current practice, and much time is often lost in vain search. This collection of representative problems furnishes a mass of data not generally available. The abundance of material makes it possible to combine judiciously various phases of different problems and work out a rounded whole with a minimum of loss of time in searching. With a volume of this kind in the hands of every pupil before him, the teacher can bring out these relationships and illustrate his points by material in their permanent possession; or the student may be required to dig out of the book in advance of the recitation period problems that will illustrate the working of an assigned principle. Furthermore, there is supplied an extensive list of sources of financial data of various kinds which will aid the student in becoming acquainted with current publications in the field. Experience in the bibliography of the field will stimulate him to look more deeply into problems stated but briefly in the text.

Special acknowledgment is owing to H. Parker Willis, Professor of Banking in Columbia University, for his helpful suggestions and criticisms in the early stages of the book's preparation, and to Mrs. Beatrice Westerfield for her invaluable assistance in preparing the manuscript and reading proof. In addition, the authors are indebted to many representatives of banks and other financial institutions, and to many writers upon the subjects of banking and public reports, both state and national, for the facts

and conditions out of which many of these problems have been built. While the number of such contributions is much too large to be adequately mentioned here, care has been taken to give due acknowledgment in the text for the source of material used.

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RAY B. WESTERFIELD.

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PROBLEMS IN BANKING, MONEY AND CREDIT

CHAPTER I

INTRODUCTION

Banking and Economics.—Next to the principles of economics the subject of banking, with or without a preliminary treatment of money, is probably the most universal course in economics in our educational institutions at the present time. In the evolution of the economics curricula in our colleges and universities, banking was among the first to be accorded the distinction of a specialized course. Moreover, the subject ranks high in university extension work, in trade and business schools, in corporate training classes, and in the educational work of trade associations. This general prominence of the subject of banking in educational circles finds warrant in the dominance of money and credit in our economic system, and in the intimate relations of our banks with our political and economic history. Our country, endowed with prolific natural resources, and having an energetic venturesome people who required vast sums of capital for development, has been disposed to experiment with every possible device for creating credit.

It is natural that banking should follow the course in elementary economics, for of all business men the banker approaches most nearly the professional economist in mental processes and in philosophy. His interests and training incline him to take a social point of view of business. His interest is not confined to any single line of business. Not only does he deal with money and credit—a universal ware—but his business is closely allied with the formation and execution of public policy in the receipt and disbursement of government funds, in the extension of foreign trade and investment, and in the development of satisfactory foreign relations. He tends to take a liberal attitude on international trade, opposing artificial trade barriers and seeking a large volume of both imports and exports. He is called upon to promote the interests of the nation abroad, to help reconstruct the finances and trade of countries disrupted by wars, and to promote our economic

penetration by securing concessions and making developmental loans. Similarly at home he is expected, even though it cost him great risk or loss, to close the gap wrought by panic and depression, to give attentive ear to those who would promote some region, industry, device or process, and to back as well as to formulate the giant corporate integrations. He is consulted about all types of investment by the customers of the bank, and his advice tends to determine the course of economic development as well as the personnel of the business world. For all those who aspire to become managers or higher officers of banks, a broad knowledge of banking institutions, history and theory such as is afforded by a university is invaluable.

Demand for Concrete Problems.—An important part of college study of banking is practice in the solution of banking problems. Nothing is more important for the banker than the capacity to make correct decisions, often on the basis of incomplete data, upon problems presented to him from time to time in the course of the business day. Each problem of the actual day must be decided usually in short order, with reference to its particular surroundings, and the best training for business men would, therefore, seem to be one that develops this capacity for deciding problems. Full command of the power of analysis, synthesis and decision comes only by long training in the executive's office, but properly directed study of problems in connection with the course in banking will do much toward aiding the development of these qualities.

Moreover, after one has had this training in dealing with the facts and fundamental theories of the subject, he will be in a position to understand and carry on his study of the executive and managerial functions of banking. He will not only have the academic discussions but he will know also a considerable amount of the details of practice. Hence with this knowledge of the theory and practice of banking he can easily understand why certain policies have been adopted and followed so vigorously by certain banking officials. The training thus obtained, if the problem method is used, will develop analytical power.

The problem method of study which has been fast gaining ground in university work, involves procuring actual problems as they have arisen in banking and other types of business enterprise, submitting the facts for study and analysis, and leaving the student to draw conclusions. The student brings into his classroom decisions and conclusions after the manner of a report, oral or written, to an executive or a board of directors, and in class these decisions are reviewed, the errors pointed out, and opinions harmonized in so far as possible.

Value of Problem Method.—The objective behind this method of study is to stimulate interest, to furnish an adequate background of facts and principles, and to train the student in the formulation of decisions after the manner of the business world. Its use does not require that problems completely supersede textbooks and lectures. These latter may well continue to be used as a rapid method of presenting general facts and background in the subject of banking, and the problems may be used in conjunction to serve the ends suggested.

The use of this method is contingent upon the possibility of procuring an adequate number of representative problems. Only with respect to the law of banking and negotiable instruments is a supply of cases or problems ready at hand; for all other phases of the subject search for problems must be made in the annals of banking. One purpose of this book is to bring together in useful form problems covering the whole field of commercial banking. The volume presents, therefore, a plenitude of problems dealing with bank practice, both within the bank and with the outside world. For the banking course in the liberal arts curriculum there are numerous problems on the nature and history and principles of money and banking at home and abroad. There are problems of a very elementary sort designed for use in first-year courses, and others suitable for the more advanced courses in theoretical or practical banking. It is confidently believed that by careful selection of material the instructor in banking will find the book readily adaptable to his course, no matter what its nature. Most of the problems in the book come directly from the banking and business world, unrefined as to statement though often disguised as to name, and are offered for interpretation on the basis of accepted principles. In some instances theories containing popular fallacies are presented for clarification and criticism.

Historical Problems.—All social institutions must be studied in their environment if one wishes a true understanding of them. Economics is a progressive science. Not all the tenets of a barter economy or self-sufficient manorial economy are applicable in the modern credit economy. Even the last century has greatly transformed our economic concepts and theories. The lessons of experience are of transcendent importance in interpreting current phenomena. Accordingly it is expedient in banking that history be employed to show the problems that have arisen in the past, the solutions made, and the principles confirmed or disproved thereby, and where possible, to indicate their similarity to and their bearing upon current problems. The most common type of historical problem given in the book is a quotation cover-

ing some historical event, followed with questions bringing out the important principles illustrated.

Problems of Banking Policy and Management.—In the United States the banks have been scattered over a very extensive territory, have had to face an immense variety of conditions and as a result have adjusted their business methods to meet these difficulties. Growing out of these varied conditions are wide differences in opinion and practice which make the work of the banking student very difficult. Banking is a business enterprise like manufacturing or transportation. In addition to the semi-public function of banking, that of receiving and holding the funds of others, it has come to be much more closely supervised and regulated in the United States than either manufacturing or transportation. The wide growth of independent banks in this country has been accompanied by the passage of many laws concerning banking. Regardless, however of the large number of different state and federal banking laws, the fundamental principles embodied in these various statutes are quite uniform though the banking technique may vary widely. It is not necessary, therefore, for the student of banking in this country at the present time to study or even read all these different acts. If he will study the National Banking Act, the Federal Reserve Act, and a good state statute like that of New York or California, he should understand quite intelligently our banking system . The student who may be interested in any particular state can easily obtain copies of the laws of that state and, if he has a fair knowledge of banking and economics, may quickly ascertain the facts of his own individual state and wherein the system differs essentially from the national banking system, and the practice in general.

The banking operations often appear very complex and difficult to the student who is beginning the study, or to the business man who is uninitiated in the methods and technique followed in carrying through the numerous transactions. The chief difficulties in banking are encountered, however, not in the field of practice but in the formation of broad banking policies and in the administration of the bank as a whole. In a book of problems, therefore, questions of policy and management occupy an important place.

Problems Relating to Current Questions.—In the past two or three decades both banking theory and technique have received much attention in this country, and the latter especially has undergone not a few important changes. Current questions relating to bank mergers and consolidations, branch banking, trust business, financing foreign trade, methods of issuing bank notes, bank investments, changes in

analytical credit work, the operation and administration of the federal reserve system as well as many other problems have stimulated a wide interest in the causes and results of these changes. Thorough acquaintance with these developments will greatly aid the student in understanding and applying his theoretical knowledge and principles.

During recent years there has been an increasing desire among the writers on banking to make the subject more directly helpful to the students. A few years ago the major emphasis was universally placed upon the historical study of money and banking, with a limited amount of time devoted to current problems. The underlying idea was of course to provide a cultural background covering what was regarded as the fundamental principles of banking in their relation to the broader field of economics. A large number of teachers and advanced students now feel that less time should be devoted to historical material and more to current problems of banking and finance. In this way it is felt that students, while missing few of the advantages of the older courses, will learn to apply principles to current, every-day problems and in this way come in closer touch with what is taking place and assist more effectively in making changes where modifications seem desirable.

Problems on Special Points.—The field of banking has become so highly specialized and the literature so extensive, that it is possible to specialize in the courses offered to a greater extent than in certain other branches of the general field of economics. The savings and trust function, the note issue function, organization of subsidiary concerns, the great attention devoted to the study of credit and subjects influencing the granting of credit, the extensive work by statistical departments and specialization on many other phases of banking make it not only possible, but desirable for one to familiarize himself to a certain extent with these changing conditions. To do this he must, unless he is a specialist in the field of banking, devote a considerable amount of attention to recent developments. To understand these recent changes he should acquaint himself quickly with the historical matter, reserving time for problems relating to current conditions.

The literature on the subject is now so great (and is increasing at a remarkably rapid rate) that students, teachers or bankers find it difficult to select the reading matter which will give them the general knowledge without giving undue attention to particular phases. Books have been and are being written on many different subjects. The analysis of credit, the credit department, commercial paper, trade and bankers' acceptances, foreign exchange, advertising, banking costs, loans and discounts, money, history of money and banking, the federal

reserve system, international banking and central banking, are only some of the subjects upon which books have been written.

Objections to Problem Method.—The criticism is sometimes made against this method of instruction that the student, or even the teacher, is given a very comprehensive set of data, is asked involved questions based upon the data, and is then left to flounder in this mire of facts without sufficient information or adequate suggestion to enable him to solve the problem presented. This situation, of course, is similar in many respects to the position in which a banker finds himself from time to time, and the ability of the banker is measured by his analysis of the sparse or redundant data, his resourcefulness in procuring the needed additional facts or in discarding useless ones, and his sagacity in drawing quick but correct decisions. The student is, however, less experienced and self-reliant and without some suggestion, at least in his earlier use of problems, is likely to be overwhelmed by the excessive quantity of facts or by the lapses in what seem essential data.

Working out the solution should, of course, call for a considerable amount of reading and study by the student but this should not be excessive. In this volume, therefore, the problem is derived from some book or document, the source is specified, and occasionally citations are given for additional materials. In the presentation of each problem an effort has been made to include whenever possible the essential facts needed by the student in preparing a solution of the problem. A problem should be so presented as to give some clue to the essential facts and principles which the operations or historical incidents cited bring out. The authors have preferred to err on the side of asking too many rather than too few questions bearing upon each set of data. Moreover, some problems are susceptible of being used to illustrate several principles, and an economy of space warrants several questions to bring out these points as well as to suggest relations to other banking matters.

Furthermore, the book is designed to function practically as a textbook and source book in itself. With problems of an historical character liberal quotations from texts, documents and periodical literature are used, which not only afford a good statement of the problem at hand but also provide instructor and student with additional illustrative material, some of which is not readily accessible elsewhere. Likewise in the selection of problems of a more practical turn, a double purpose is served by basing the problem on some banking form or document, in the phraseology of the street, and on some actual transaction that arises within a bank.

Source Material.—In Chapter XXVIII certain valuable types of material are assembled in a form which the student will find important in his study and which are not elsewhere easily available. Tables and other data showing the values of different kinds of money in terms of dollars, foreign exchange rates, business indexes, statistics relating to national and state banks, federal reserve system, etc., are brought together for the convenience of both the instructor and students in carrying on their regular study. Here are listed also a large number of government reports, and publications and current periodicals both of commercial banks and other financial and business organizations, which have proved to be of considerable interest to teachers and students alike. Many of the reports and publications may be obtained upon request, free of charge. Others may be had at a nominal cost. The instructor should take the opportunity to secure at least a few for the benefit of his students, and to show them the type of material being prepared and published in the field at the present time.

Problems dealing with banking technique and practice should be so presented as to outline the actual banking procedure in so far as it is possible of attainment in the classroom. Such knowledge of the practical side, if used judiciously, will materially aid the student in understanding many of the more fundamental and theoretical aspects of this important subject. The aim has been at all times to secure the problems which will illustrate certain principles rather than to conform to any special sequence. The problem method if used solely requires considerable time. In fact most teachers will not find time to assign and discuss all the problems, but by using them with a textbook a very satisfactory combination can be easily obtained which will make possible the use of those most suitable and appropriate for the individual class needs.

Methods Adapted to Individual Needs.—Some phases of banking can be more easily treated by lectures, or the lack of time may make it necessary to cover certain parts of the course rather rapidly by that method. If such occasion arises it will not in any way interfere with the use of the problems for other phases of the subject. Problems may, therefore, be combined very successfully with the textbook assignments. Many will form an excellent basis for discussion. The students should do a large amount of collateral reading in order to obtain the proper background and to secure the facts needed to answer the questions growing out of the problems. The data may be applied to local conditions by having the students change the content by substituting state laws where the national law is referred to in this volume. If a New York, Chicago, Georgia or any other bank is referred to, the

student may use the "First State Bank and Trust Company" of his own home town.

The method followed in handling these problems must be adapted to the needs of the individual class. Time will set certain limits upon the plan to be pursued. One of the best methods from the standpoint of the student is that of carefully writing out each assignment and handing it in for criticism. In doing this the student is forced to think the problem through very carefully. Doubtful points should then be discussed in the classroom. This procedure has the virtue of taking up less time in the class period. Short classroom discussions may be had to a good advantage. Students in this way have the advantage of a larger number of problems with a minimum amount of time spent on their preparation. Regardless of the method followed a certain amount of classroom discussion will be necessary in order to tie the various problems to the underlying principles and practice of the entire field of banking.

The student will find in this process many leading, attractive and unsolved questions which will challenge him. The problem should, if properly presented, arouse a keener interest and a questioning frame of mind. The students should work over these problems, bring their textbooks to the classroom in order to follow easily problems assigned to other students. Unless this is done they will find it rather difficult at times to follow and participate in the discussion. By a skillful use of the problems in this way, the course can, it is believed, be made more interesting and vital. The student will see a more direct relationship between the fundamental principles and practice. In short, he will find the course more interesting and instructive. He will leave the course with a more comprehensive view of the subject and its importance in the general field of economics.

CHAPTER II

MONEY AND COINAGE

1. Money in Circulation in the United States

Fill out the following table, giving the essential facts for each class of money.

Metal	Weight in Gold	Limit of Issue	Legal Tender	Where and in What Redeemable	Fineness	Amount in Circulation June 30

Paper	Limit of Issue	Legal Tender	Where and in What Redeemable	Specific Security if Any	Issued by	Amount in Circulation June 30

(a) Which types of metal money are known as minor coins? subsidiary? (b) Of the various kinds of money listed above, which, if any, are no longer being coined or issued? (c) At what time of year in the United States would you expect the money in circulation to be greatest? Why?

2. Uses of the Term *Money*

Money is cheap or dear, easy or tight. A man is worth so much *money*. A man has so much *money* in his business. When we see any marked expenditure by the public, we express wonder where all the *money* comes from. *Money* includes: currency in circulation, bank deposits drawable by check. *Money* is a form of circulating media which is generally acceptable. Confusion of *money* with capital, wealth, property, measure of wealth, welfare.

(a) Comment upon each of these uses.

3. Circulation Statement of United States Money—January 1, 1927

See following page for data.

(a) Has the per capita circulation of money fluctuated more or less than the price level? (b) What per cent reserve is held against the United States notes? Is this constant? (c) Give the reason for the statement made in note *d* of table. (d) Give the reason for statement in note *b* of table. (e) Is it proper to include in the "stock of money" the "United States paper currency in circulation in foreign countries and the amount held by the Cuban agencies of the federal reserve banks"? (f) Should gold certificates held in the reserves of the federal reserve banks be regarded as "in circulation"? (g) What is the distribution (geographical) of the silver dollar?

4. Changes in the Amounts of Different Moneys in Circulation

Account for the following changes in the amounts of the different types of money in circulation since 1913: (a) The decrease in Treasury notes of 1890. (b) The decrease in silver certificates in 1918-1919. (c) The decrease in gold certificates 1915-1918. (d) The increase in gold certificates 1921*ff*. (e) The increase in federal reserve notes 1917-1919. (f) The decrease in federal reserve notes 1921-1922. (g) The increase in silver dollars 1921-1922. (h) The decrease in national bank notes 1916-1917. (i) The increase in federal reserve bank notes 1915-1918.

Data for Problem 3

Circulation Statement of United States Money—January 1, 1927

Kind of Money	Stock of Money *a*	MONEY HELD IN THE TREASURY					MONEY OUTSIDE OF THE TREASURY				Population of Continental United States (Estimated)
		Total	Amt. Held in Trust against Gold & Silver Certificates (& Treas'y Notes of 1890)	Reserve against United States Notes (and Treasury Notes of 1890)	Held for Federal Reserve Banks and Agents	All Other Money	Total	Held by Federal Reserve Banks and Agents *f*	In Circulation		
									Amount	Per Capita	
Gold coin and bullion	$ *b*4,502,429,488	$ 3,657,147,612	$ 1,680,416,339	$ 154,188,886	$ 1,628,695,531	$ 193,846,856	$ 845,281,876	$ 422,383,080	$ 422,898,796	$ 3.64	
Gold certificates	*c*(1,680,416,339)						1,680,416,339	588,355,410	1,092,060,929	9.40	
Stan. silv. doll's	534,981,184	469,116,882	466,128,485			2,988,397	65,874,302	14,293,397	51,580,905	.44	
Silver certif's	*c*(464,788,181)						464,788,181	68,036,040	396,752,141	3.41	
Treasury notes of 1890	*c*(1,340,304)						1,340,304		1,340,304	.01	
Subsidiary silver	295,452,961	3,107,687				3,107,687	292,345,274	10,766,216	281,579,058	2.42	
U. S. notes	346,681,016	2,879,898				2,879,898	343,801,118	46,990,993	296,810,125	2.56	
F. R. notes	2,260,821,500	1,595,626				1,595,626	2,259,225,874	434,789,013	1,824,436,861	15.70	
F. R. bank notes	5,149,658	133,070				133,070	5,016,588	49,090	4,967,498	.04	
Nat. bank notes	697,767,929	15,360,559				15,360,559	682,407,370	53,511,780	628,895,590	5.41	
Total Jan. 1, '27	8,643,293,736	*d*4,149,341,334	2,146,544,824	154,188,886	1,628,695,531	*e*219,912,093	6,640,497,226	1,639,175,019	5,001,322,207	43.03	116,232,000
Comparative totals:											
Dec. 1, 1926	8,485,116,656	*d*4,183,670,291	2,138,376,040	154,188,886	1,674,219,455	216,885,910	6,439,822,405	1,490,565,144	4,949,247,261	42.62	116,114,000
Jan. 1, 1926	8,484,266,521	*d*4,175,414,293	2,160,270,263	153,620,986	1,649,387,435	212,135,609	6,469,122,491	1,461,001,583	5,008,120,908	43.62	114,813,000
Nov. 1, 1920	8,326,338,267	*d*2,406,801,772	696,854,226	152,979,026	1,206,341,990	350,626,530	6,615,390,721	987,962,989	5,628,427,732	52.36	107,491,000
Apr. 1, 1917	5,312,109,272	*d*2,942,998,527	2,684,800,085	152,979,026		105,219,416	5,053,910,830	953,320,126	4,100,590,704	39.54	103,716,000
July 1, 1914	3,738,288,871	*d*1,843,452,323	1,507,178,879	150,000,000		186,273,444	3,402,015,427		3,402,015,427	34.35	99,027,000
Jan. 1, 1879	1,007,084,483	*d*212,420,402	21,602,640	100,000,000		90,817,762	816,266,721		816,266,721	16.92	48,231,000

a Includes United States paper currency in circulation in foreign countries and the amount held by the Cuban agencies of the federal reserve banks.

b Does not include gold bullion or foreign coin outside of vaults of the Treasury, federal reserve banks, and federal reserve agents.

c These amounts are not included in the total since the money held in trust against gold and silver certificates and Treasury notes of 1890 is included under gold coin and bullion and standard silver dollars, respectively.

d The amount of money held in trust against gold and silver certificates and Treasury notes of 1890 should be deducted from this total before combining it with total money outside of the Treasury to arrive at the stock of money in the United States.

e This total includes $16,371,584 of notes in process of redemption, $177,952,033 of gold deposited for redemption of federal reserve notes, $11,265,682 deposited for redemption of national bank notes, $3,590 deposited for retirement of additional circulation (Act of May 30, 1908), and $6,614,600 deposited as a reserve against postal savings deposits.

f Includes money held by the Cuban agencies of the federal reserve banks of Boston and Atlanta.

5. Kinds of Money Held by Banks 1896, July 1

Geographical Distribution	Total No. of Banks	No. of Banks Reporting	No. of Depositors (000)	Amount of Deposits (000,000)	Total Amount of Cash (000)	Gold Coin (000)
New England	1,226	829	1,357	$ 691	$ 35,689	$13,092
Eastern States	2,137	1,275	2,567	1,569	213,129	42,684
Southern States	2,053	676	449	157	29,086	8,578
Western States	6,266	2,434	1,211	617	109,584	50,752
Pacific States and Territories	1,280	509	344	218	25,634	18,969
Total	12,962	5,723	5,929	$3,254	$413,124	$34,077

Geographical Distribution	Gold Certificates (000)	Silver Dollars (000)	Fractional Silver (000)	Silver Certificates (000)	Treasury Notes of 1890 (000)	Legal Tender Notes (000)	Currency Certificates (000)	National Bank Notes (000)
New England	$ 2,311	$ 516	$ 999	$ 4,678	$ 1,455	$ 7,875	$ 650	$ 4,110
Eastern States	45,895	1,990	2,773	20,471	4,936	68,912	17,517	7,948
Southern States	980	2,147	1,037	3,907	2,330	6,754	562	2,788
Western States	5,658	2,928	2,039	9,943	3,768	24,706	1,939	7,847
Pacific States and Territories	636	671	548	662	635	2,219	190	1,100
Total	$55,481	$8,254	$7,399	$39,663	$13,126	$110,469	$20,858	$23,795

(a) On July 1, 1896, there were 9,260 banks other than national banks. Of the 5,723 banks reporting above, 2,265 were banks other than national and reported $34,484,000 gold coin and gold certificates. On July 14, the total gold coin and gold certificates of all the national banks of the country amounted to $161,853,000. On the basis of the above data make an estimate of the total gold reserve of the banks of the United States. (b) The free gold held by the Treasury on July 2 was $101,648,000: what was the total gold base of credit in the United States? (c) On July 14, the total individual deposits of national banks was $1,668,413,000 for the 2,435,625 depositors. On July 1, the total number of depositors in the 2,265 non-national banks reporting was 3,614,630, with deposits aggregating $1,668,352,000. On the basis of the above data make an estimate of the total amount of deposits of banks in the United States. (d) On the basis of the results of (a), (b) and (c) above, how many dollars of deposit liabilities rested upon each dollar of gold base? (e) From the most recent Report of the Comptroller of the Currency, get the total individual deposits of the national and non-national banks and the holdings of gold and gold certificates of these banks and of the Federal reserve banks and of the United States Treasury. Then calculate the ratio of deposits to gold reserve. How does it compare with conditions

in 1896? (f) What items in the above table have been entirely eliminated or very much reduced since 1896?

6. Estimating the Stock of Gold and Silver in the United States

The United States Mint makes an annual estimate of the amount of gold and silver money in the United States as of June 30: suggest some method by which the following factors affecting stock may be estimated: (a) Total amount coined, and recoined, since 1792. (b) Total amount lost on land and sea, annually, and since 1792. (c) Total amount exported and carried by travelers out of the country. (d) Total amount returning to the United States. (e) The total amount reduced to bullion and used in the arts. (f) Total amount put into numismatic collections and removed from circulation. (g) Should gold bullion circulated by means of gold certificates be regarded as coined in this estimate? (h) Should our coins circulating in Cuba, Porto Rico, Panama, etc., be regarded as part of our money stock? (i) Near the borders the coins of Canada and Mexico circulate in the United States; these coins are very similar to our own; they take the place of so many American coins, or are in addition to our coins; should they be added to the United States stock?

Procure from the Director of the United States Mint a statement as to how these matters are handled. What is the probable margin of error in the Director's estimate?

7. The Gold Standard as Stabilator of Exportation and Importation

Under the gold standard an adverse trade balance with exchanges depressed toward the gold point tends to check imports and to increase exports. When, however, the gold standard is abandoned and the exchange rates are left without anchor, a falling tendency in the exchanges tends actually to increase imports and to check exports. Importers reason that they had better buy all they can before the exchanges go still lower. Exporters reason that they will do better to withhold their exports until a later time when the exchanges are lower and they can sell them for higher prices in their domestic currency.—[Chase Economic Bulletin, March 23, 1925, p. 12, courtesy of B. M. Anderson, Chase National Bank, N. Y.]

Criticize this position on the relative merits of the two standards.

7-A. Relation of the Price of Gold and Silver to Their Industrial Consumption

(a) Are gold and silver substitutes or complementary articles on the demand side of the market? Should their prices move together or opposite? (b) But the price of gold has been constant since 1837 in the United States: why? (c) How does this constancy of gold

price affect the price of silver? (d) In time of general prosperity and rising general price level should the consumption of gold and silver jewelry and plate increase faster than the consumption of other luxuries?

8. The Advantages to South Africa of Return to Gold Standard

The South African gold standard commission proposed the following advantages to South Africa if she return to the gold standard: (1) A greater stability in the value of her monetary unit, in its purchasing power, both internal and external. (2) Greater stability in interest rates and a lower level of real interest rates. (3) Stability of exchange with gold standard countries, and consequent increase in demand for her products. (4) Greater confidence abroad in South Africa and resulting encouragement to the investment of foreign capital here. (5) Greater confidence of labor which believes that it has been taken advantage of by the introduction of inconvertible paper money. (6) A benefit to the gold industry of South Africa through encouraging, by example, the return of other countries to the gold standard. [See Federal Reserve Bulletin, 1925, p. 175.]

Show why it was believed that each of these results would follow the adoption of the gold standard by South Africa.

9. Relative Stability of Price Levels Under a "Managed Currency" and the Gold Standard

The Honorable Reginald McKenna, governor of the Midland Bank in 1925, (see the bank's monthly bulletin for January-February, p. 2, and for February-March, p. 1) declared that the British "managed currency" between 1915 and 1925 resulted in greater price stability in England than the gold standard afforded the United States.

To check this statement plot the Statist and Bradstreet index numbers, reduced to a common base year, and compare the frequency and range of fluctuation. Plot both on semi-logarithmic paper and compare the rate of fluctuation.

10. The Effect of Changing Price of Silver on Shanghai Exchange

Given the following average prices in New York:

		Silver	Shanghai Exchange
1915	June.....	$0.510 per oz.	56.50¢ per tael
	Dec.....	.578	63.00
1916	June.....	.681	72.00
	Dec.....	.798	89.00
1917	June.....	.857	90.38
	Dec.....	.943	114.00

	Silver	Shanghai Exchange
1918 June.....	$1.071 per oz.	113.50¢ per tael
Dec.....	1.062	125.00
1919 June.....	1.181	127.50
Dec.....	1.375	170.00
1920 Jan.....	1.340	156.00

Par 1 tael = 65.49¢, the average price in 1913.

(a) Plot the two series on ratio paper and draw a conclusion as to the relation of the price of silver and the rate for Shanghai exchange. (b) Name some other factors affecting the rate of Shanghai exchange than the price of silver. (c) Did this rise in Shanghai exchange help or hurt the exportation of Chinese products? the importation of American products into China?

11. Effect of the Changes in the Price of Silver on the Silver Reserves Held by Chinese Banks

In 1917 La Situation Economique, of Paris, commented on the fact that the high price of silver had resulted in heavy sales of silver by Chinese banks and merchants, the loss of reserves being 15,000,000 taels in the first half of the year. In September, 1926, the Shanghai banks had unprecedented stocks of silver, caused by the drop of silver prices.

(a) Is the change of price of silver the cause of the change of reserve, or is it the result? (b) If the price of silver is low at the same time that the weight of silver stock is large, the value of the silver stock may be quite constant and the reserve position of the banks not change much: is this a dependable stabilizing force? (c) In 1918 China proposed an embargo on silver exports: justify such a measure.

12. Effect of the Pittman Act on India

Quotation from Sir James Meston, Finance Member Designate of the Viceroy's Council in August, 1918:

As a result of her archaic currency system, India became last spring a victim of her own wartime prosperity, and if Congress had not heeded the representations of Lord Reading she might have met with financial disaster. Normally, India has an adverse trade balance of about £18,000,000, but as the war cut off most of her imports and has increased the value and number of her exports, the balance in her favor is now about four times as great as her former deficit. This, of course, sent Indian exchange up, and the value of the rupee in London, normally 1s. 4d., rose steadily to 1s. 7d. Things began to look serious for Indian exporters, who feared the high rate would drive purchasers away; and the government took steps to fix the exchange artificially.

But this did not meet the internal situation in India. There was an absolute lack of rupees. Indian financiers have always been faced by the difficulty that the Indian masses do not understand any modern currency systems. Numbers of them do not know what checks or paper money are.

They want actual hard cash, and they have an incorrigible habit of taking silver and gold coins and beating them into bangles and other ornaments for their wives. Under the peculiar circumstances of the war this habit almost resulted in disaster. Prices were rising, but there was actual lack of currency to carry on business. The Government tried to meet the situation by issuing one-rupee notes, but the people were suspicious of them. They thought it meant the government could not meet its liabilities, and last March a serious run on the currency reserves developed. People from the country districts were hurrying to cash their notes, and for a few weeks the government had a very anxious time. It was faced with the danger of having to declare its notes inconvertible, and it knew if there was a lack of silver at any one center the result would be most serious. Unrest would increase enormously, recruiting would cease just when it was most needed, the manufacture of munitions would be interrupted, and exports of wheat, jute, cotton, and other necessities for the allies would stop.

It was the United States that saved the situation. By passing the Pittman Act, Congress gave India an opportunity to obtain silver . . . some of this silver is now reaching India. . . . The Indian government believes its currency difficulties are over.

(a) Why is India called "the sink of precious metals"? Why does not the influx of gold and silver raise the price level and automatically stop the flow of metal thither? (b) What are the reasons why it is so difficult to introduce paper money into India? (c) Do the phenomena here presented indicate that a larger volume of money causes high prices, or that high prices call for a larger volume of money? (d) Was the silver shipped to India under the Pittman Act permanently sunk in India, or has it been returned by India?

13. Indian Currency Reform

In 1919 the British Secretary of State for India appointed a commission, "To examine the effect of the war on the Indian exchange and currency system and practice, and upon the position of the Indian note issue, and to consider whether, in the light of this experience and of possible future variations in the price of silver, modifications of system or practice may be required; to make recommendations as to such modifications, and generally as to the policy that should be pursued with a view to meeting the requirements of trade, to maintaining a satisfactory monetary circulation, and to ensuring a stable gold exchange standard."

As a result of the report of this commission India was changed in 1920 from a sterling and silver basis to a gold basis, with gold as the standard of value and silver at a legal tender at a fixed ratio of one rupee for 11.30016 grains of fine gold, and the English sovereign a legal tender in India at 10 rupees. For the time being, gold imports were to continue in control and be converted into rupees at the rate of 15 to the pound sterling.

(a) When the legal tender ratio was fixed at 11.30016 grains of fine gold per rupee, what ratio is that per pound sterling? What mint price for an ounce of silver does it represent? (b) Note that the rupee was chained to gold, and not to exchange rates on London. What was the purpose of this arrangement?

14. Dearth of Silver Coins 1853

Corwin, in January, 1853, again called attention to the general conditions, saying that no indication of relief was near, but rather a prospect of reduced supplies of silver. He added:—

This state of things has banished almost entirely from circulation all silver coins of full weight, and what little remains in the hands of the community consists principally of the worn pieces of Spanish coinage of the fractional parts of a dollar, all of which are of light weight, and many of them ten or twenty per cent, below their nominal value.—[Sen. Doc. 22, 32d Cong. 2d sess., 1853, p. 11.]

(a) How did the change of ratio in 1834 from 15:1 to 16:1 bring about the above situation of the coinage? (b) Why should the coins in circulation be principally "worn pieces of Spanish coinage of the fractional parts of a dollar, all light weight"? What had become of the full-weight coins?

14-A. Debasement of Subsidiary Silver

Under the Act of 1792 the weight of silver put into a dollar of subsidiary silver coins was 416 grains 0.89 fine; under the Act of 1837 it was 412.5 grains 0.9 fine; and in 1853, 384 grains 0.9 fine. Compute the amount of fine silver in a dollar under each law, and state the percentage debasement from the original weight.

15. Actual Value of Gold and Silver in the Standard Coins of Each Metal

(a) In return for 200 oz. of pure gold, how many gold eagles would the Treasury Department be entitled to give? Is there any limit to the volume of gold that could be exchanged with the government on this basis? Who bears the cost of the alloys and interest during the period of minting? (b) Can silver be converted into silver dollars on the same basis? into subsidiary silver coins? (c) Secure the actual market quotation for silver at the present time. From that quotation determine the market value of the silver in a silver dollar. In a 50-cent piece. Show your calculation. (d) What is the market value of the gold in an eagle? the mint value? Is the difference seigniorage? Is the eagle a credit instrument on account of this difference?

16. Gold Certificates as Legal Tender

The following figures were cited in a letter [see Report No. 316, to accompany S. 3458, in 66th Congress, 2nd Session] dated December 5, 1919, from the Secretary of the Treasury, Carter Glass, to the Chairman of the Senate Committee on Banking and Currency, George P. McLean, urging that the gold certificates be made legal tender on account of the pressing need for notes of the smaller denominations:

Amount of $1 and $2 denominations outstanding on October 31, 1919:

United States notes	$152,560,518
Treasury notes of 1890	525,832
Federal reserve bank notes	220,865,800
National bank notes	505,464
Silver certificates	121,869,917
Total	$496,327,531

(a) Which of the above items were legal tender? (b) What was the occasion of the issue of so many federal reserve bank notes at this time? How is the decrease since 1919 explained? (c) How did the Pittman Act tend to reduce the small denomination legal tender money in the United States in 1919? (d) In the ten days immediately preceding this letter the price of silver ranged between $1.29 and $1.375: how did this high price of silver tend to prevent the issue of the federal reserve bank notes under the provisions of the Pittman Act? (e) The Treasury at the time of this letter had on hand an adequate supply of $1 and $2 denominations legal tender notes, but it could not issue them except in exchange for unfit notes or for notes of larger denominations: what are the provisions of law on this point? (f) Of the total amount of legal tenders outstanding at the time of this letter a large part was held by the banks on account of their legal tender quality; why should they husband such notes at this time? Note that this practice prevented their conversion to smaller denominations, as well as their circulation. If the gold certificates were made legal tender, would the banks continue to husband the legal tender notes? (g) The legal tender bill [S.3458, of the 66th Congress, 2nd Session] which was then before Congress and urged by the Secretary of the Treasury, did not propose to give the legal tender quality to "the $10,000 gold certificates which are payable to order, and of which there are outstanding $654,670,000:" what is the nature of these certificates, why were they excepted in this bill, and what is their status as to legal tender now? (h) The legislation under which the gold certificates were issued was section 6 of the Act of March 14, 1900, as amended by the Acts of March 4, 1907, and of March 2, 1911, and of June 12, 1916: what

were these various provisions? (i) It has been suggested that Congress did not give the gold certificates the legal tender quality originally because it did not want to accord them advantages over the silver certificates, and because of the feeling that paper issues with legal tender qualities should not be increased: is there any evidence in the legislative history above cited for these suggestions? [See Congressional Record, and the Congressional Documents, on these bills.]

17. The Cost of the Greenbacks

Cost of the gold reserve, including liability for principal of bonds sold and interest thereon to their maturity

Principal of bonds sold for resumption purposes:		
1877 and 1878		$ 95,500,000
1894		100,000,000
1895		62,315,400
1896		100,000,000
Total principal		357,815,400
Interest at 4% on average amount of the free gold in the Treasury from Jan. 1, 1879, to Jan. 1, 1895		93,440,000
		451,255,400
Interest:		
Jan. 1, 1895 to July 1, 1907, on $95,500,000 4% bonds of 1907		47,750,000
Jan. 1, 1895 to Feb. 1, 1904, on $100,000,000 5% bonds		45,416,666
Feb. 1, 1895 to Feb. 1, 1925, on $62,315,400 4% bonds		74,778,480
Feb. 1, 1896 to Feb. 1, 1925, on $100,000,000 4% bonds		116,000,000
		735,200,546
Amount of U. S. notes still outstanding		346,681,016
Total cost and liability		1,081,881,562
If the U. S. notes had been funded on Jan. 1, 1879, into the 30-year 4% bonds of 1907, then being sold, the total cost to the Government therefor, including interest to July 1, 1907, would be:		
Principal of bonds	$346,681,016	
Interest from Jan. 1, 1879 to July 1, 1907	395,216,340	741,897,340
Net difference in favor of converting the notes into bonds		$ 339,984,222

[Report of the Comptroller of the Currency, 1896, p. 108]

(a) Criticize the above calculation, as to interest on the free gold, and as to the use of the gold procured to defray government expenses. (b) In the light of the above calculation is it legitimate to state that the greenbacks represent non-interest bearing debt and are consequently carried without additional tax upon the public? (c) Does the above calculation allow for the expense of issuing and redeeming the greenbacks? (d) Do the greenbacks circulate at par on account of this gold reserve or is the maintenance of the reserve made possible by the smallness of the greenback issue circulating?

18. Chase's Plans for Financing the Civil War—The Circulating Notes and the National Bank Notes

Secretary Chase, in his report to Congress, estimated the sum required at $318,000,000 and recommended both taxation and loans. His plan embraced taxation sufficient to cover the ordinary expenses of the government, interest on the debt, and provision for the sinking fund, the extraordinary expenses to be covered by loans. His scheme for borrowing included non-interest bearing notes payable on demand, interest-bearing notes for short terms, and bonds for long terms; the first to be convertible into the second, and the second into the third, form of obligation. Thus he expected to avert the evil which many of his predecessors experienced, of being compelled to receive for payments to the Treasury the notes of state banks, most of which were fluctuating in value, and might even become valueless on his hands. He hoped that $100,000,000 of the loan might be placed abroad, but his hope was not realized. While thus suggesting notes to circulate as money, he urged great care "to prevent the degradation of such issues into an irredeemable paper currency, than which no more certainly fatal expedient for impoverishing the masses and discrediting the government of any country can well be devised."

Congress adopted Chase's plan in the act of July 17, 1861, which authorized the borrowing of $250,000,000, either in 6% twenty-year bonds, or 7.30% three-year Treasury notes in denominations not less than $50, or in one-year 3.65% notes, or non-interest bearing notes of less than $50, redeemable on demand. Notes under $10 were prohibited, and the demand notes were not to exceed $50,000,000. These might also be issued to pay public creditors and be redeemed in 7.30's, and when redeemed they might be reissued at any time prior to December 31, 1862, provided the total limit of the loan was not exceeded. The amending act of August 5, 1861, provided for the exchange of the 7.30 notes into bonds, the limit of the loan ($250,000,000) not to be exceeded; for the issue of "demand" notes of $5; directed that the latter class be receivable for all public dues; furthermore, suspended the subtreasury act of 1846, so far as to permit the moneys received from loans to be deposited in "solvent, specie-paying banks" and drawn upon for payments. It will be observed that the demand notes were not made specifically payable in coin, but were universally regarded as coin notes, since no other legal tender money existed at the time.

In his report in December, 1861, Chase, still hopeful of an early cessation of the war, discussed two plans for the currency. He pointed out that the banks in the states in rebellion had about one-fourth of the estimated circulation for the whole country, and that of the remaining $150,000,000 a very considerable part was of doubtful value in an emergency. He ventured the opinion that the issue of state bank notes was not constitutional, and proposed that the large amount thus practically borrowed, without interest, from the people by state banks, should, by legislation, be made to inure to the advantage of the general government. An issue of government notes would, in his opinion, serve the purpose of furnishing a uniform circulating medium, and at the same time aid the government in its emergency; but the dangers of overissue, inadequate provision for redemption, and consequent depreciation were, he thought, so great as to outweigh the advantages. He therefore recommended a national bank currency secured by bonds, which would yield all that a government issue could, and not be open to

the same criticism.—[Hepburn, History of Currency, Revised ed., 1924, pp. 180-2, The Macmillan Co., New York, by permission.]

(a) A learned writer on public finance states the principle that the degree to which a war should be financed by taxation in a democratic country "should be the popular enthusiasm for the war." On this basis was Chase's resort to circulating note issues and bonds defensible? (b) How did the mistaken estimate as to the duration of the Civil War influence the methods of financing it? (c) How are political motives of Chase alleged to have influenced it? (d) What was the purpose of making the notes convertible into short-term interest-bearing notes, and the latter into long-term bonds? (e) Why was the taxing of state bank notes out of existence postponed until 1866? (f) What was Chase's attitude toward the state banks? Did he use them as depositories? (g) Was Chase clothed with too little power to make his plans as finance minister a success? Was he an experienced financier? (h) Was the balance of trade at this time in his favor?

19. Prohibition of Loans on Greenbacks or Bank Notes

On February 19, 1869, Congress passed an act prohibiting national banks making loans on collaterals of United States notes or national bank-notes, a practice which might obviously be used to cause a considerable contraction of the currency.—[Hepburn, History of Currency, rev. ed., 1924, p. 213, The Macmillan Co., New York, by permission.]

(a) What was the occasion for such legislation? (b) Explain how the currency could be contracted by collateral loans. Would it not result in the substitution of deposits for notes or cash and therefore not reduce the circulating media and price level?

20. Proposed Plans for Disposing of the Greenbacks

1. To issue notes, payable in gold in two years from date, at the rate of $4,000,000 monthly, in lieu of the greenbacks.
2. To apply the sinking fund solely to the extinction of the greenback debt.
3. As national bank note issues increase cancel a like amount of greenbacks, down to $300,000,000.
4. To issue notes and 3.65 bonds interconvertibly, limit of notes otherwise to be $400,000,000.
5. Substitute greenbacks for national bank notes, redeeming the 5.20 bonds on deposit to secure the same, in such notes.
6. Repeal the legal tender act, to go into effect July 1, 1876, notes to be funded into bonds.—[Hepburn, History of Currency, rev. ed., 1924, p. 221, The Macmillan Co., New York, by permission.]

(a) What were the virtues of these respective plans? (b) What was the "inflation bill" of 1874? What was its fate? (c) What were the provisions of the Act of June 20, 1874, with respect to the greenbacks?

21. Stop of Contraction of Greenbacks 1878

The House had tired of waiting for the Senate, and on April 29 passed a bill introduced by Fort (Rep., Ill.) to suspend the cancellation of redeemed United States notes, and directing their reissue. The vote stood 177 to 35, the negative vote including only 7 Democrats. Only the strongest representatives could resist the tide; Foster and McKinley voted for it and Garfield against it. The Senate passed this bill May 28 by a vote of 41 to 18, having first rejected Bayard's amendment that such reissued notes were not to be legal tenders. The affirmative vote included Blaine, Davis, and Windom; the negative Bayard, Conkling, Hoar, and Morrill. Generally speaking, the negative vote was from the Eastern states. Sherman favored the measure and hence Hayes approved it on May 31, without a protest. The volume of notes then, as today, was $346,681,016.—[Hepburn, History of Currency, rev. ed., 1924, p. 233, The Macmillan Co., New York, by permission.]

(a) What economic or political conditions had arisen since 1875 to occasion this reversal of position on contraction of the greenbacks? Could the Republicans and Hayes' veto have defeated the Act of May 31? (b) Observe the allignment of the above-named statesmen on this bill, and compare it with their position on the silver bills of 1878 and 1890. (c) What is the amount of the greenbacks today?

22. Leading Monetary Changes 1873-1896

(000,000 omitted)

Country	Gold			Silver			Uncovered Paper		
	1873	1896	Change	1873	1896	Change	1873	1896	Change
	$	$	$	$	$	$	$	$	$
United States	135.0	672.0	537.2	6.2	631.4	625.2	749.4	424.4	−325.0
Great Britain	160.0	584.0	424.0	95.0	121.7	26.7	59.8	111.8	52.0
France	450.0	772.0	322.0	500.0	492.2	− 7.8	385.3	98.0	−287.3
Germany	160.2	675.0	514.8	306.2	207.0	−99.2	90.8	126.1	35.3
Russia	149.1	488.6	339.5	18.6	43.5	24.9	618.4	467.2	−151.2
Italy	20.0	100.4	80.4	23.0	39.0	16.0	87.8	168.5	80.7
Belgium	25.0	50.0	25.0	15.0	57.0	42.0	35.1	72.5	37.4
Netherlands	12.0	26.8	14.8	37.3	56.2	18.9	15.3	32.5	17.2
Austria-Hungary	35.0	167.2	132.2	40.0	65.0	25.0	265.8	204.5	− 61.3
Australasia	50.0	130.0	80.0	3.0	7.0	4.0	.....	.....	.....
Denmark	4.1	16.5	12.4	7.5	5.4	− 2.1	6.5	4.6	− 1.9
Sweden	1.8	8.5	6.7	4.3	4.9	0.6	6.0	.....	− 6.0
Norway	7.6	7.5	−0.1	1.6	2.0	0.4	2.3	3.8	1.5
Total	1,209.8	3,698.7	2,488.9*	1,057.7	1,732.3	674.6*	2,322.5	1,713.9	−608.6†

* Net increase. † Net decrease.
[Report of the Comptroller of the Currency, 1896, p. 29.]

(a) The net increase in gold stocks was $2,488.9 millions, and of silver $674.6 millions: from the Statistical Abstract of the U. S. compute the total production of gold and silver of the world for these years. What part of the production went into monetary use? (b)

Combining the gold, silver, and uncovered paper money, what was the net change in the world's monetary stock during this period? Did it raise the price level? Why? (c) Account for the following items: the decrease of $325 millions in uncovered paper in the United States; of similar items in France, Russia and Austria-Hungary; the increase in silver in the United States, the slight loss in France, and the greater loss in Germany.

23. International Monetary Conference, 1878

Proposals of American delegates:

I. It is the opinion of this assembly that it is not to be desired that silver should be excluded from free coinage in Europe and in the United States of America. On the contrary, the assembly believe that it is desirable that the unrestricted coinage of silver, and its use as money of unlimited legal tender, should be retained where they exist, and, as far as practicable, restored where they have ceased to exist.

II. The use of both gold and silver as unlimited legal-tender money may be safely adopted; first, by equalizing them at a relation to be fixed by international agreement; and, secondly, by granting to each metal at the relation fixed equal terms of coinage, making no discrimination between them.

The European delegates replied:

I. That it is necessary to maintain in the world the monetary functions of silver as well as those of gold, but that the selection for use of one or the other of the two metals, or of both simultaneously, should be governed by the special position of each state or group of states.

II. That the question of the restriction of the coinage of silver should equally be left to the discretion of each state or group of states, according to the particular circumstances in which they may find themselves placed; and the more so, in that the disturbance produced during the recent years in the silver market has variously affected the monetary situation of the several countries.

III. That the differences of opinion which have appeared, and the fact that even some of the states, which have the double standard find it impossible to enter into a mutual engagement with regard to the free coinage of silver, exclude the discussion of the adoption of a common ratio between the two metals.—[International Monetary Conference, 1878, Senate Ex. Doc. No. 58, 45th Congress, 3d Session, pp. 22, 163.]

(a) What provision was made for this conference in the Bland-Allison Act, 1878? (b) Who were the American delegates? What European countries were represented? (c) What was accomplished by the conference?

24. The Need for More Money, 1880-1890

That the alleged need for "more money" was fictitious or greatly exaggerated, is demonstrated by the fact that the national bank circulation

diminished during the decade (1880-1890) from $359,000,000 to $186,-000,000. This was the only form of paper money which was to an appreciable degree affected as to volume by the demands of trade, and the evidence is conclusive that it diminished chiefly because there was no legitimate demand for the continued large volume. The reported gold stock showed an increase of $343,000,000, and the silver supply was augmented $310,000,000; the growth of available money was much greater than the increment in population and trade, for the amount per capita of money outside the Treasury was in 1880 $19.41, in 1890 $22.82.—[Hepburn, History of Currency, rev. ed., 1924, p. 250, The Macmillan Co., New York, by permission.]

(a) If Hepburn's allegations are true, why did the price level fall during the period? (b) Does the fall in the price level explain the geography of the demand for more money? (c) What is the proper measure for the "need" of money for a country? (d) Procure an index of the physical volume of trade for the period 1865 to 1896, plot it on ratio paper, and against it plot the Census figure for population, and the Aldrich Committee's index of wholesale prices. Draw conclusions as to the validity of Hepburn's paragraph.

25. How Resumption of Specie Payments Was Accomplished in 1879

The act of January 14, 1875, required the Secretary of the Treasury, on and after January 1, 1879, to redeem "in coin of the United States legal-tender notes then outstanding, on their presentation for redemption at the office of the assistant treasurer of the United States in the city of New York, in sums of not less than fifty dollars." At the time of the passage of this act the leading industries and general business of the country, were greatly depressed. The accomplishment of resumption depended upon the accumulation of a sufficient gold reserve by 1879 and the creation of confidence in the ability of the Secretary of the Treasury to maintain a sufficient reserve.

(a) A favorable balance of trade would tend to reverse the flow of gold. Look in the "Statistical Abstract of the United States" and see whether the balance of trade after 1875 was favorable? Was there a net inflow of gold? (b) It was important that the country enjoy more prosperous conditions of industry and commerce. Does the "Statistical Abstract" show greater crops after 1875? Can you find any other statistical data showing the condition of the country during these years, such as railroads built, bank clearings, business failures, etc.? More prosperous conditions should yield greater taxes: did the government revenues increase? (c) What action in October, 1878 (see the Report of the Comptroller of the Currency of 1878) did the banks of Boston and New York take to strengthen the hands of the

Treasury? (d) Why did the Sub-Treasury become a member of the New York Clearing House? (e) The Secretary of the Treasury sold in 1877 at par in coin $15,000,000 of 4½s and $25,000,000 4s of the bonds authorized in the Act of July 14, 1870, and in 1878 he sold $50,000,000 of 4½s at a premium of 1½%. Could this device have been depended upon to defend the gold reserve had a run upon the Treasury occurred after January 1, 1879? Did President Cleveland employ it successfully in 1894-95? (f) By January 1, 1879, a gold reserve of $135,382,639 had been assembled, besides $32,476,095 in silver. What ratio did this reserve bear to the volume of greenbacks outstanding? Did the reserve increase or decrease after resumption? (g) Did the general price level fall from 1875 to 1879? How did this affect general business conditions? How did it affect the rate of exchange on London?

26. Windom's Proposal for Silver 1889 and Sherman Silver Act 1890

Windom proposed the following:

"Issue Treasury notes against deposits of silver bullion at the market price of silver when deposited, payable on demand in such quantities of silver bullion as will equal in value, at the date of presentation, the number of dollars expressed on the face of the notes at the market price of silver, in gold, at the option of the government; or in silver dollars at the option of the holder. Repeal the compulsory feature of the present coinage act."

The price was not to exceed $1 for 412½ grains of standard metal.

In support of the measure he argued that while satisfying the demand for the continued use of silver, it provided a note-issue which could not depreciate, hence was *sound;* would enhance the value of silver to a point where free coinage would be safe; prevented contraction by supplying the place of bank-notes rapidly being retired, yet would not cause inordinate or unhealthy expansion; would if successful point a way for other nations to take. Loss to the government by reason of depreciation of the bullion was exceedingly remote, but even if it came to pass, the government having assumed the duty of providing currency must stand it; nor could an opportunity be given for speculation in silver, the option to redeem in gold being a sufficient check; no flood of silver need be feared to cause undue inflation, because being taken at the *market price* it would not pay Europe to surrender her coins; he estimated the surplus product of silver at 40,000,000 ounces, and the proposed law, if limited, would at the maximum take 50,000,000 ounces; there was no substantial stock on hand anywhere; he preferred that there be no limit on the amount; if any limit were deemed advisable it should be by excluding foreign silver altogether.—[Hepburn, History of Currency, rev. ed., 1924, pp. 301-2, The Macmillan Co., New York, by permission.]

(a) How did this proposal differ from the existing law of 1878? (b) Was it, as alleged, "sound?" (c) How was the plan changed by amendment into the Sherman Silver Purchase Act of 1890? (d) Did

McKinley vote for this Act? (e) How was this legislation promoted by the existence of Treasury surpluses? (f) Under the Act how fast would the government liabilities for notes increase? Was the gold reserve increased *pari passu?* (g) The proposal was a compromise designed to satisfy the agricultural interests, clamoring for "more money," and the mercantile interests asking for suspension of compulsory silver purchases: show that it was a compromise, and explain the above allignment of parties.

27. How Sherman Accomplished Resumption

As stated officially in his report in December, 1878, Sherman had acquired a gold fund of over $133,000,000, of which $96,000,000 had been derived from bond sales, the balance from surplus revenues, the income of the government having improved as "hard times" passed. He had suspended the issue of gold certificates; had arranged that the Treasury use the New York clearing-house to facilitate and cheapen the collection and payment of checks and drafts, with only partial use of cash, at the point where three-fourths of his payments were made; had concentrated his coin in New York, where alone under the act of 1875, notes could be presented for redemption, and had resolved to receive the legal tender notes for customs without legislation—a privilege he could in the absence of law revoke at any time. He feared that a law making United States notes receivable for customs would deprive the government of the power to exact coin, and might prove embarrassing if an emergency arose. He expressed the view that the act of 1878 prohibiting further cancellation of notes was wise, and stated his purpose to pay either gold or silver in redemption of notes, as preferred by the holder, but reserving to the government the right, which it had under the law, to pay in either.—[Hepburn, History of Currency, rev. ed., 1924, p. 234, The Macmillan Co., New York, by permission.]

(a) What was the reason for each of the above cited steps in preparation for resumption? (b) During the first year of resumption only $706,658 were presented for redemption: give the reasons for the small amount.

28. Passage of the Resumption Act 1875

The Republicans still having control of Congress for the short session ending March 3, 1875, Sherman immediately prepared a bill which, while by no means as satisfactory as might have been expected, was all that in his opinion Congress would assent to. It provided for the retirement of the fractional currency with subsidiary silver coin; the repeal of the gold coinage charge; free banking and the retirement of greenbacks to the extent of 80% of new bank-note issues, until the amount of the former was reduced to $300,000,000; the redemption of greenbacks in coin on and after January 1, 1879; authorized the use of the surplus coin in the Treasury for this purpose and the sale of bonds without limit to provide such further coin as might be needed. The bill was reported from the Finance Committee December 21; passed the Senate December 22 by a vote of 32 to 14 (27

not voting); passed the House January 7, 1875, 136 to 98 (54 not voting). Not one Democratic vote was cast in favor of the measure, and a number of the extreme sound money Republicans in the House voted against it, as not sufficiently strong. Grant approved the bill January 14.—[Hepburn, History of Currency, rev. ed., 1924, pp. 222-3, The Macmillan Co., New York, by permission.]

(a) What had been the result of the election of 1874? The Republicans had been continuously in power: how do you explain the delay in passing a resumption act, and its passage on March 3, 1875? Was there any political purpose in setting the date for resumption in 1879? What pledges in connection with resumption had been violated since 1866? (b) Did the Resumption Act provide for the retirement of the greenbacks? was it expected to retain the $300,000,000 permanently in circulation? (c) What was the purpose of substituting bank notes for greenbacks? (d) Was the impoverishment of the nation a good excuse for the delay in resumption from 1865 to 1879? (e) On March 3, 1875, the premium on gold was 12½%, by 1875 it had become zero. Would the hoarding of greenbacks during this time have been a good investment? (f) The surplus gold received from customs which was sold by the government at a premium from 1866 to 1876 exceeding $500,000,000. Does this nullify the argument that the resumption of specie payments had been impossible?

29. Brussels Conference on Silver, 1892

The international conference on silver, called by Harrison, met in Brussels in November following the election. The United States were represented by Senator Allison (Ia.), Senator Jones (Nev.), Representative McCreary (Ky.), ex-Comptroller of the Currency H. W. Cannon, Prof. E. B. Andrews of Brown University, and E. H. Terrell, United States Minister to Belgium. Twenty countries were represented, one of Great Britain's delegates being a member of the banking-house of Rothschild.

The delegates from the United States were instructed to endeavor to secure international bimetallism or, failing in that, action tending to a largely increased monetary use of silver to arrest depreciation. They soon found the former proposition to be out of the question. A sentiment favorable to an increased use of silver was manifest but no practical method could be agreed upon. France would not support any measure which would increase its stock of silver. Great Britain, manifestly concerned chiefly on account of India, seemed anxious that the price of silver be kept steady, but evidently did not intend to change her monetary system. The conference adjourned in January until May, 1893, and again to November, 1893, but never reassembled.

The United States were ably represented at this conference by men schooled in economics and possessed of practical experience as well.—[Hepburn. History of Currency. rev. ed.. 1924, pp. 346-7, The Macmillan Co., New York, by permission.]

(a) How was the conference affected by the election in the United States and by Congressional action while it was in session? (b) Did this conference prove the impossibility of international bimetallism? Was it afterward made a plank in party platforms?

30. Why Cleveland Resorted to the Morgan-Belmont Syndicate

One month later, Congress having failed to act, and the continuing exports having reduced the gold reserve to less than $42,000,000, Cleveland informed Congress that, in order to maintain gold payments, he had been compelled to authorize a special contract (with a syndicate) to procure gold under the old law of 1862 continued as section 3700 of the Revised Statutes. The contract called for the purchase of gold to the value of $65,116,244, by the sale of $62,315,400 4% thirty-year *coin* bonds at 104.496; if, however, Congress would authorize a 3% *gold* bond, the same would be taken at par by the syndicate and result in an ultimate saving of over $16,000,000; inasmuch as the coin bonds would doubtless be paid in gold at maturity, such legislation should be promptly passed in order that the above-mentioned sum might be saved. Congress refused by a vote of 120 to 167 to grant the authority asked for and the more expensive course had to be adopted. Four per cent bonds issued in 1877 had but recently been quoted at 129.

Under this contract the syndicate not only undertook to furnish the gold, but to take none from the Treasury with United States notes, to actually import one-half of the sum contracted for, and to do all in its power to prevent exports of gold during the period of the contract.—[Hepburn, History of Currency, rev. ed., 1924, pp. 358-9, The Macmillan Co., New York, by permission.]

(a) How did Secretary Carlisle propose (January 9, 1895) to stop "the humiliating process of issuing bonds to procure gold to be immediately drawn for purposes not related to the benefit of the government or our people?" (b) Was the syndicate plan successful? How could the syndicate reverse the direction of the international flow of gold? (c) Were the deficient revenues of the government or the low credit of the government the chief adverse factor? (d) Does the argument that the greenbacks are a non-interest bearing debt have any validity in the light of the bond issues at this time?

31. The Economy of Credit Money

Of the important changes in currency practice and management effected by the war one is the substitution of paper notes for gold coin in circulation.

(a) Illustrate this statement by currency figures of different countries. (b) What legal provisions promoted this substitution? How did inflation cause it? (c) Which of the following are valid objections to carrying the gold reserve in the pockets of the people: (1) it earns nothing; (2) it wears itself away; (3) it is inefficient,

because it must be collected before it can fully perform its reserve functions?

32. The McFadden Gold Bonus Bill of 1920

The McFadden bill provided for a tax of 50 cents per pennyweight of fine gold for all gold manufactured, used or sold for other than coinage or monetary purposes, including jewelry and other purposes of ornamentation and dentistry (with some exceptions for children and charity cases). From the funds thus collected and "any other funds in the Treasury of the United States not used for specified purposes," there was to be paid a bonus to the producers of new gold in the United States of $10 per fine ounce down to May 1, 1925, and that thereafter both the tax and the premium were to be readjusted annually by certain government officers in accordance with the commodity price index number, as determined by the Bureau of Labor Statistics. The tax and the premium were both to rise or fall after May 1, 1925, according as the index number might rise or fall.

(a) What were the two purposes of the tax? (b) What has been the average annual consumption of gold in the arts in recent years? How productive would the tax have been? (c) Why was the bonus restricted to new gold and to production within the United States? (d) Would the bonus have changed the price of gold? (e) Why was it thought advisable to subsidize gold production in 1920? (f) Would such a bonus have relieved the gold miners from 1920 to 1925? (g) If the $10 bonus were to be continued indefinitely into the future, would it have afforded permanent relief for the gold producers? (h) What was the logic of making the bonus and the tax vary with the price level? Would this feature have made the plan yield permanent relief for the gold producers? (i) Is there any special reason why the government should bind itself to stabilize the costs of the production of gold any more than of shoes?

33. Factors Favorable to Resumption of Specie Payments

The commission listed the following as factors favorable to resumption in the near future:

(1) The South African pound, for over two months, as measured by the bank's telegraphic transfer rates on London, taken in conjunction with the dollar rate on London, has been within 2% of gold parity.

(2) Index numbers of wholesale prices in 20 leading countries indicate that the wholesale price level of South Africa is lower in relation to the price level immediately preceding the war than is the price level in any other country of the world for which we have comparable statistics.

(3) South Africa's gold position is strong, because (a) the Reserve Bank has a reserve of 64% against its outstanding notes and deposits com-

bined; (b) the two principal commercial banks in South Africa are holding heavy sterling balances in London; (c) South African mints have a capacity to meet the probable demand for coinage; (d) South Africa is the premier gold producing state of the world.

(4) The past year has been one of prosperity for her gold mines and agriculture.—[Report of South African Gold Standard Commission, 1925; see Federal Reserve Bulletin, March, 1925, pp. 173-4.]

Show why each factor is regarded as favorable?

34. Redistribution of the Gold Reserves of the World During the War and After

RESERVES OF THE CENTRAL BANKS

	Dec. 31, 1913	Dec. 31, 1924
Austria-Hungary	$ 251,421,000	
Austria		$ 1,550,000
Hungary		6,927,000
Poland		19,874,000
Czechoslovakia		23,871,000
Belgium	59,131,000	52,205,000
France	678,856,000	710,394,000
Germany	278,687,000	131,494,000
Great Britain	170,245,000	757,033,000
Italy	288,103,000	221,000,000
Netherlands	60,898,000	202,854,000
Spain	92,490,000	489,292,000
Denmark	19,666,000	56,148,000
Norway	12,846,000	39,457,000
Sweden	27,372,000	63,518,000
Switzerland	32,801,000	97,588,000
United States	1,069,766,000	3,236,000,000

[Commission of Gold and Silver Inquiry, U. S. Senate, Serial 9, Vol. I, p. 19.]

(a) What European countries have lost gold and which have gained? (b) Make a total of the gold holdings of these countries at the two dates. Remembering that immense amounts of gold have been shipped by these countries to Latin America and the Far East, what have been the sources of the gain between 1914 and 1924? (c) Most of the European countries are not poorly off in respect to gold reserve: (1) They already have a substantial gold reserve each. (2) The circulation of the metal will probably be discouraged as much as possible even after they are on a gold basis. (3) Although the price level on a gold basis is about 35% higher than in 1913, it is probable that this will fall somewhat, and only the pre-war amount will be required. (4) European production is now at low scale; consequently, the demands for money and currency in the immediate future there will not be as great as later. (5) Europe can borrow gold from the United States in emergencies. Develop these arguments. (d) Given the following figures: Total monetary gold in United States on January 1, 1925, was $4,547,407,000, which is $2,623,046,000 more than in 1914.

Net importations of gold during this time were $2,240,000,000 Domestic gold production $750,000,000; total world gold production a little over $4,000,000,000. What became of the world's production of gold during this period?

35. Limit of Tolerance

Gold coin shipped to the Federal Reserve Bank of San Francisco (or its branches) should be sent by express, charges prepaid. Credit will be given your account for face value of coins received. We will charge your account for any coins below "least current weight" at the rate of two cents for each half grain below standard weight.

The "standard weight" and "least current weight" of gold coins are given in the following table:

	$20	$10	$5
Standard weight	516 grains	258 grains	129 grains
Least current weight	513.42 grains	256.71 grains	128.36 grains

By "least current weight" is meant the minimum weight at which a coin, twenty years minted, will be accepted at face value at the United States Treasury.—[Announcement by Federal Reserve Bank of San Francisco, December 15, 1922.]

(a) What is the law as to "limit of tolerance"? For a 20-year old gold coin is it equivalent to "least current weight"? Calculate them. (b) Suppose a gold coin minted 5 years ago was below its "limit of tolerance" by 12 grains. Calculate its weight. Is there any indication in the above announcement as to what the San Francisco bank will do in such case? (c) Is the price 2 cents per half-grain below standard weight a fair rate of charge for worn coins? (d) In the case of silver and minor coins the bank announces that they will "be accepted at face or nominal value provided it is possible to determine the genuineness of the coins by denominations": justify the greater liberality in case of silver than of gold coins.

36. Movement of Specie 1830 to 1860

EXPORTS AND IMPORTS, UNITED STATES

Years	Exports		Imports	
	Gold	Silver	Gold	Silver
1831–1835	$ 7,963,900	$17,873,605	$ 8,351,935	$42,974,961
1836–1840	13,578,435	17,423,953	25,588,296	30,554,104
1841–1845	10,724,258	19,705,113	21,525,334	19,771,321
1846–1850	20,695,177	13,886,373	31,739,452	13,799,885
1851–1855	184,017,429	13,145,180	13,960,026	11,799,057
1856–1860	279,790,526	18,158,678	23,845,192	28,083,659

[Hepburn, History of Currency, rev. ed., 1924, p. 69, The Macmillan Co., New York, by permission.]

(a) What was the cause of the rapid increase in gold exports? Was it the change of ratio in 1834, the discovery of gold in California in 1849, or what? (b) Account for the decrease in silver imports from 1840 to 1855. Was it due to the change of mint ratio in the United States in 1834, the change in market ratio from 15.73:1 in 1834 to 15.38:1 in 1855, or what?

37. Gold and Silver Imports and Exports and the Foreign Trade Balance 1890-96

EXPORTS AND IMPORTS AND GOLD MOVEMENT

Fiscal Year	Merchandise			Silver			Gold			Notes Redeemed in Gold	Gold Reserve
	Exports	Imports	Excess −Exp. +Imp.	Exports	Imports	Excess −Exp. +Imp.	Exports	Imports	Excess −Exp. +Imp.		
1891	884	845	−39	24	26	+ 2	86	19	−67	6	118
1892	1030	827	−203	34	29	− 5	50	50		9	114
1893	848	866	+18	42	34	− 8	109	21	−88	102	95
1894	892	655	−237	51	20	−31	77	72	− 5	85	65
1895	808	732	−76	48	20	−28	67	36	−31	117	108
1896	883	780	−103	61	27	−34	112	34	−78	159	102

[Hepburn, History of Currency, rev. ed., 1924, p. 368, The Macmillan Co., New York, by permission.]

(a) Why during this period was there an adverse balance of merchandise trade? of silver? of gold? How were the government revenues affected by the balance of trade? the tariff? (b) Was all the gold that was received for notes redeemed exported? (Make allowance for the American product during these years.) (c) Compare these figures with the annual balances in 1897 and later years.

38. Relative Volume of Business Done on Money and on Deposits

I. President Garfield, speech on Resumption, November 16, 1877, on data as of 1871:

I selected three groups; the first was the city banks, the second consisted of banks in cities of the size of Toledo and Dayton in the State of Ohio. In the third group, if I may coin a word, I selected the 'countriest' banks, the smallest that could be found, at points away from railroads and telegraphs. The order was that those banks should analyze all their receipts for six consecutive days, putting into one list all that can be called cash—either coin, greenbacks, bank notes, or coupons—and into the other list all drafts, checks, or commercial bills. What was the result? During those six days $157,000,000 were received over the counters of the 52 banks, and of that amount $19,370,000—12 per cent only—was in cash, and 88 per cent, that vast amount representing every grade of business, was in checks, drafts, and commercial bills.

II. Report of the Comptroller of the Currency, 1881, p. 15. Returns from 1,966 of the 2,106 national banks in operation on June 30, 1881, and from 2,132 banks, being all the national banks in operation on that date:

Items	June 30, 1881		Sept. 17, 1881	
	Amount (000)	Per Cent	Amount (000)	Per Cent
Checks, drafts, and bills	$261,271	91.77	$271,036	91.85
Clearing house certificates	9,582	3.36	6,592	2.24
Paper money	11,554	4.06	13,026	4.36
Gold coin	1,864	.65	4,078	1.38
Silver coin	440	.16	500	.17
	$284,714	100.00	$295,233	100.00

III. Report of the Comptroller of the Currency, 1890, p. 24. Analysis of national bank receipts:

Items	July 1, 1890 3,364 Banks		Sept. 17, 1890 3,474 Banks	
	Amount (000)	Per Cent	Amount (000)	Per Cent
Checks, drafts, etc	$189,408	44.90	$168,803	51.58
Exchange for clearing house	194,290	46.06	126,596	38.68
Miscellaneous	2,138	.50	135	.04
		91.46		90.30
Gold coin	3,726	.89	3,702	1.13
Silver coin	1,352	.32	1,399	.43
Gold Treasury certificates	6,427	1.52	6,159	1.88
Silver Treasury certificates	6,442	1.53	5,908	1.81
Legal tender notes	7,881	1.87	7,665	2.34
National bank notes	5,244	1.25	4,371	1.34
National bank notes	520	.12	105	.03
Legal tender certificates	4,391	1.04	2,428	.74
	$421,824	100.00	$327,278	100.00

IV. Report of the Comptroller of the Currency, 1896. Returns of 3,474 national banks and 2,056 State and other banks, as of July 1, 1896:

Gold coin	$ 1,868,000	0.6%
Silver coin	1,643,000	.5
Total specie	3,512,000	1.2
Currency	19,084,000	6.3
Checks	280,339,000	92.5
Total	$302,936,000	100.0%

(a) Generalize as to the relative amounts of the various media of exchange in actual circulation. (b) Were there any evidences of trend in the data for the four decades given?

39. The Money Commodity

(a) What attributes render the following commodities poor for use as the monetary medium: copper, lead, iron, wheat, diamonds, platinum, ivory, cattle, wampum, peag? (b) Which metals are regarded "precious," and why? (c) Why did not the same forces that eliminated the baser metals from the money of advanced nations also eliminate gold and silver? (d) During the medieval period gold practically disappeared from monetary systems: why? During the fourteenth century gold was increasingly evident in circulation: why? Was any rational decision made to use both gold and silver after the fifteenth century? Why were they jointly used thereafter?

40. Advantages of the Gold Standard

I. The following are given as advantages of the gold standard:

1. Facilitates the accomplishment of other needed measures.
2. Makes financial calculations easy and certain.
3. Eliminates the exchange fluctuations which are so demoralizing both to business and public finance.
4. Limits enormously the possibilities of speculative manipulations and speculative raids.
5. Maximizes public confidence.
6. Gives financial prestige to the country in foreign money centers.
7. Regulates automatically the foreign trade balance, visible and invisible.
8. Links the money market of a country with the money markets of the rest of the world, making it easy for foreign aid to come to a country in a money market crisis.

(a) Which of these claims for the gold standard should have weighed heavily with the French financiers in 1926? with the American financiers in 1896? (b) Which claims are controversial? (c) Which claims apply only in case a country is on an inconvertible paper basis and is deciding to re-establish the gold standard?

II. . . . the recovery of the gold standard will stimulate or depress our commerce according to whether the world's output of gold at its current value is above or below the world's demand.—[Address R. McKenna, *Monthly Review,* Midland Bank, February-March, 1925, by permission.]

(a) Elucidate McKenna's point and determine its validity. (b) Give specific meaning to the "world's demand" for gold, and suggest a method of determining whether it is greater or less than the current production of gold.

41. "Gold Bullion Standard"

In 1926 the Royal Commission on Indian Currency and Finance recommended that, as in the past, the currency of India consist of silver rupees and notes, the value of which in relation to gold is to be stabilized at 18d. instead of the pre-war ratio of 16d; that the value of the rupee as measured by foreign exchange rates be fixed at 1s. 6d.; that the value of both rupees and notes continue to be maintained primarily by purchases and sales of foreign exchange, but both the rupees and the notes be also convertible into 400-ounce gold bars, thus placing the Indian currency upon what the Commission called a gold bullion standard; that the price of the bars always include a surcharge covering the cost of gold shipments from London or other markets and this charge be doubled when exchange is below the gold import point.

(a) When the rupee is valued at 1s. 6d., how many will it take to equal a pound sterling? (b) The plan for converting rupees and notes into gold bars at a price varying with the cost of gold shipments is designed to bring it about that the Indian demand for other than monetary uses will be supplied as in the past by direct imports on the part of the bullion merchants: explain.

41-A. Relation of Bullion and Money

"The value of gold as bullion affects the value of gold as money only by increasing or decreasing the supply of money."

"Importations of gold frequently increase the amount of purchasing power by an amount greater than the amount of the imported gold."

(a) Explain these propositions.

42. Demand for and Consumption of Silver in the United States

Reverting to this continent, we estimate that the U. S. Bureau of the Mint has purchased seventeen million ounces for subsidiary coinage, and that the Mexican Government has bought three million two hundred and eighty-seven thousand ounces to replenish their silver currency. We understand that Central and South America have also bought for coin-

age requirements, but the names of the countries and the amounts secured are not available at present.

The arts and industries in the United States used more silver during 1925 than ever before.

The consumption, according to our estimate, was 31,000,000 ounces, or 11% more than 1924, and 6% more than 1923, which was the best year heretofore. The following figures show the amounts of silver used during the past five years:

1921	18,000,000	Ounces
1922	24,000,000	"
1923	29,000,000	"
1924	28,000,000	"
1925	31,000,000	"

Manufacturers of sterling silverware and silverplate ware report that the volume of business in 1925 was most satisfactory, and that the holiday trade was especially good.

The outlook for the months of 1926 is very favorable, as the demand for merchandise to replenish depleted stocks is likely to be brisk.

The chemical and photographic industries also had a successful year. We estimate that the silver used for these purposes reached a total of 7,000,000 ounces.—[Review of the Silver Market for 1925, pp. 7-8, Handy and Harman, New York City, by permission.]

(a) What is the "U. S. Bureau of the Mint"? When was it established? (b) How do you account for this increased use of silver? (c) Is this increased consumption of silver likely to continue in the future? (d) How did the adoption of the policy provided for in the Pittman Act influence the price and industrial use of silver in the years 1920 to 1923? (e) How did the carrying out of the provisions of the Pittman Act affect the industrial use of silver during 1919 and 1920?

43. Relative Stability of Gold and Silver

As COIN closed the reading of the extract from the *San Francisco Chronicle,* Mr. Joel Bigelow asked him to read an extract from a paper published in London called *"The Colonies and India"* which Mr. Bigelow then had in his hand. COIN consenting, Mr. Bigelow came forward with the paper, and COIN read the extract as follows:

One of our contemporaries asks: "What is the most constant standard of value in existence?" There can be but one rational answer, in fact—viz., silver. The value of a ton weight of silver on any given day—whether expressed in £, s., d., in dollars and cents, in francs, in marks, or in rupees and pice, and (compared on the same day with) the sum of the market prices of standard test quantities of each of one hundred varieties of the most generally-dealt-in commodities of the market, also expressed in the same money terms—have by statistical observation and many hundreds of official tests, practically been found the constant equivalent, on the same market, of each other during the last five and twenty years since the system of "index numbers" was invented and applied to this branch of national business. This fact stands officially recorded. For

Great Britain the Board of Trade publishes tables which prove it, and such, or their own private statistics, are regularly printed in leading commercial journals. Continental scientists also regularly publish their independent statements of these "index numbers." The truly marvelous fact above stated, is thus capable of absolute verification by each one for himself, and if this does not prove silver to be the true and world-wide standard of value then there is no significance in facts. The metal gold, on the contrary, tried by the same supreme test, shows itself to be in no sense a "standard" of value, for it jumps about like the mercury in a barometer with every movement of the commercial atmosphere, its vibrations—to speak within the fact—having dodged about, up and down, as much as 20 per cent. down from a given point and then back to that point, and then 20 per cent. up from that same point, all within the short space of 40 or 50 years! How in the name of commercial sanity, how with a profession of national honesty, how with a claim to the meanest common sense, the Government of England continues to oppose the restoration of our ancient, proved, and only honest standard of value passes the wit of sane onlookers to understand.—[Coin's Financial School, 1894, p. 87.]

(a) Test statistically the allegations made in this excerpt.

44. The Chinese Tael

The tael as a coin is purely fictitious—no such coin exists: the tael, or liang (as the Chinese term it), is actually a measure of weight, equivalent to 583.3 gr., but in this strange Oriental land it is used as a measure of value. The special divisions of the tael for currency purposes are—

10 Cash	1 Candareen
10 Candareens	1 Mace
10 Mace	1 Tael

The Chinese way of expressing them is—

10 Li	1 Fen
10 Fen	1 Ch'ien
10 Ch'ien	1 Liang

Just as there is no tael coin in circulation, neither are there to be found any coins called mace and candareen: they are all measures of weight as well as of value. Nevertheless the tael, as such, is circulated in bank notes and native orders. Strictly speaking, all that the tael conveys to the native mind is a Chinese ounce of silver of various degrees of purity (its real weight should be 1 1/3 oz. avoirdupois, say, 37.783 grammes). But there is no fixity even here: the tael of silver differs in fineness, in weight, and exchangeable value according to the lights of the officials or people of every province, town, or village; it also has to be judged by what is known as "olo custom" (old custom). Every place has its own tael weight, and some of them maintain several standards at the same time; and if, perchance, the tael weight were the same on any given day in any two centres, it would be only a mere coincidence.—[Spalding, Eastern Exchange, p. 337, Isaac Pitman & Sons, 2 W. 45th Street, New York, by permission.]

(a) Is every unit of money a standard of weight? Is the American dollar a unit of weight primarily, and incidentally a unit of value? (b) In what respects, according to the above description, does the tael function badly as a unit of value? as a circulating medium? (c) Account for the extreme confusion and lack of uniformity in Chinese monetary units. (d) The following are the most important taels: the Haikwan tael, the Kuping, or Treasury tael, and Tsao-ping tael, and the Canton tael. What are the characteristics of each and where are they used?

45. Method of Sale of Silver in London

The principal first sellers of silver in the London market, through the four brokers who do almost all the business, are "the smelters, whose custom it is to sell their silver at the London market price and to buy at once a similar amount of ore at a corresponding price. The smelters obtain from the silver miners, or, rather, the mine-owners, a certain fixed sum in gold for each ton of ore to meet the charges incidental to smelting and selling. It is obvious, therefore, that the price of silver in reality determines the price of the ore, and, consequently, the profits of the first sellers are not materially decreased when the price of silver falls nor increased much if it rises. . . . Chief among the buyers are the Governments, and Governments . . . are, in a way, not directly interested in the price. It is to their country's interest, of course, to buy the metal as cheaply as possible; but where you get countries coining silver at certain ratios for their subsidiary silver coins, a considerable profit reverts to the country from the seigniorage, and it is, generally speaking, a matter of small moment whether the price be a fraction higher or lower.—[Spalding, Eastern Exchanges, p. 266, Isaac Pitman & Sons, 2 W. 45th Street, New York, by permission.]

(a) Can the indifference of the first sellers and the government buyers as to the price of silver be given as one cause of the decline of price during the period 1870 to 1914? (b) Is the price of ore determined by the price of silver, or vice versa? (c) Is the sale of silver and the purchase of ore simultaneously a hedging operation? (d) What are the names of the four brokerage houses in London that handle the silver?

46. Factors Causing Larger Demand for Silver Coinage during the War

During the late war the mints of the United States, Great Britain and other countries were extraordinarily busy coining silver coins: show how this activity was occasioned by the following factors:

(a) The payment of the soldiers in France in silver. (b) The withdrawal of gold from circulation, and into reserves. (c) The hoarding of silver. (d) Exceptionally large shipments of silver to India. (e) The higher price level. (f) The prosperous times in the

United States. (g) The imposition of consumption taxes, on theater tickets, soda fountain products, etc.

47. Phenomena Following a Rise in the Price of Silver

When in 1920 the price of silver went above $1.29, the following phenomena occurred:

(a) Bills were introduced into the Canadian and other legislatures to reduce the silver contents of the silver coins. (b) The fineness of the silver coins was reduced in Canada, England, Holland, Mexico, Honduras and other countries. (c) Effort was made by western congressmen to re-establish bimetallism. (d) The legal tender of the rupee was changed from the immemorial rate of 15 to the pound sterling, to 14, and later to 10. (e) The American silver dollars were reduced to bullion and shipped to India. (f) The rate of exchange in New York on Shanghai rose rapidly. (g) Chinese importations of commodities increased faster than their exports.

Show the relation of these phenomena to the high price of silver.

48. Seigniorage and Brassage

I. Mint operations consist of assaying, parting, refining, standardizing by adding alloy, making the coins, counting and weighing the coins, and accounting to the Treasurer or citizens bringing the bullion.

(a) Who pays for the alloy? for each of the above operations? (b) If the government charges 5 cents per dollar coined, and the total amount of its coinage expenses is less than 5 cents, explain the relation of seigniorage and brassage to the above-named mint operations. (c) Explain "tolerance of the Mint," "minimum circulating weight," "trial of the pyx," and "sweating."

II. Limit of Tolerance: A gold eagle was coined in 1913; it now weighs, on account of abrasion, only 253 grains: is it a legal tender? Why is a limit of tolerance necessary? Is the imposition of the loss by abrasion within the limit of tolerance justly put upon the United States Government? Is it just to assess the loss beyond the limit of tolerance upon the holder? Does the operation of the limit of tolerance tend to take worn coins out of circulation or to keep them in circulation? Does the operation of the limit of tolerance illustrate Gresham's Law?

49. Constitutional Provisions for Coinage

In regard to a coinage system the Constitution provides: Art. I, Sec. 8. "The Congress shall have Power . . . To coin Money, regulate the Value thereof, and of foreign Coin." Sec. 10. "No State shall . . . coin Money; make any Thing but gold and silver Coin a

Tender in payment of Debts." In this way the states surrendered the right to coin money, and transferred the power over the standard to the federal government.

(a) What is the historical reason why coinage is made a government monopoly? (b) If profit is made from coinage to whom should it redound? (c) Does the right "to coin money" include the right "to issue paper money"? (d) What are the ways in which the government can "regulate the value" of money? (e) When English sovereigns are imported into the United States, does the United States Government determine or "regulate the value . . . of (these) foreign coin(s)"? (f) Are the states inhibited from making silver coins a legal tender? (g) The surrender of the right of coinage by the states to the federal government facilitates trade and commerce in what ways?

50. Coinage of the United States

(000 omitted)

Years	Total Gold	Silver Dollars	Fractional Silver
1792–1795	$ 71	$ 205	$ 166
1796–1800	943	1,053	17
1801–1805	1,533	182	288
1806–1810	1,717		3,099
1811–1815	1,346		2,622
1816–1820	1,821		3,348
1821–1825	600		5,844
1826–1830	1,303		10,937
1831–1835	8,632		15,372
1836–1840	10,146	62	11,910
1841–1845	20,214	567	10,842
1846–1850	69,002	435	10,519
1851–1855	214,143	108	22,864
1856–1860	130,264	1,528	23,132

[Hepburn, History of Currency, rev. ed., 1924, pp. 52, 70, The Macmillan Co., New York, by permission.]

(a) Why did the coinage of silver dollars cease in 1806? (b) Is there evidence that fractional silver coins took the place of silver dollars? (c) The net importation of gold and silver from 1826 to 1830 amounted to almost exactly ten million dollars: did it go into the industrial arts or into money? (d) The commercial ratio of gold and silver ranged from 15.70:1 to 15.95:1 from 1821 to 1830; this was higher than in any previous period. How did it affect our silver coinage? (e) Account for the wide disparity between the number of silver dollars coined and the amount of gold coined? (f) Why did silver coinage increase in the '50s?

51. Effect of Coinage Acts of 1834 and 1837

The ratio became 15.988 to 1, the same as it is today. The difference is so slight that the custom has become universal to characterize the present coinage ratio as "16 to 1", thereby ignoring the fractional difference of .012. The coinage of both metals was made free and unlimited, and in fact the coinage of silver dollars was resumed.

The above-mentioned ratio placed a valuation upon gold of 52 cents per ounce higher than that generally prevailing in Europe. It made the silver dollar worth $1.03 measured by the gold dollar. Ere long silver began to depart for Europe, where the ratio of 15½ to 1 prevailed, and also to India, which had adopted the single silver standard in 1835 at the ratio of 15 to 1. The commercial ratio of gold to silver did not equal our coinage ratio until 1874, silver all this time commanding a small premium. Although trade balances were for a number of years adverse, the placing of investments abroad proved more than an offset and the stock of gold in the country increased. Notwithstanding the continual export of United States silver coin, the influx of silver coins from Central and South America, which had been made legal tender, prevented any serious shortage of small coins for some time.—[Hepburn, History of Currency, rev. ed., 1924, pp. 60-61, The Macmillan Co., New York, by permission.]

(a) The commercial ratio of gold and silver in 1834 was 15.73 to 1. How is the above figure 52 cents arrived at? $1.03? (b) What effect do adverse trade balances and investments abroad have on the flow of gold? (c) Did the new ratio 16 to 1 encourage the importation of silver coins from Central and South America?

52. Power of Government to Change Value of Precious Metals

(Speech of the principal opponent of the Currency Bill of 1853, Andrew Johnson of Tennessee, later Vice-President and President:)

I look upon this bill as the merest quackery—the veriest charlatanism—so far as the currency of the country is concerned. The idea of Congress fixing the value of currency is an absurdity, notwithstanding the *language* of the Constitution—not the meaning of it. . . . If we can, by law, make $107 out of $100, we can, by the same process, make it worth $150. Why, Sir, of all the problems that have come up for solution, from the time of the alchemists down to the present time, none can compare with that solved by this modern Congress. They alone have discovered that they can make money—that they can make $107 out of $100. If they can increase it to that extent they can go on and increase it to the infinity, and thus, by the operation of the mint, can the Government supply its own revenues. The great difficulty of mankind is solved, the idea that so much money is wanted all over the world is at length at an end.—[*Congressional Globe,* XXVI, p. 475.]

(a) How much did the Act of 1853 change the value of the silver in the subsidiary silver coins? (b) Is the "idea of Congress fixing

the value of currency . . . an absurdity"? (c) Can the government "go on and increase it to infinity, and thus, by the operation of the mint . . . supply its own revenues"?

53. The Bland-Allison Silver Act of 1878

Bland's bill:

That there shall be coined, at the several mints of the United States, silver dollars of the weight of 412½ grains troy of standard silver, as provided in the act of January 18, 1837, on which shall be the devices and superscriptions provided by said act; which coins together with all silver dollars heretofore coined by the United States, of like weight and fineness, shall be a legal tender at their nominal value, for all debts and dues public and private, except when otherwise provided by contract and any owner of silver bullion may deposit the same at any United States mint or assay office, to be coined into such dollars for his benefit upon the same terms and conditions as gold bullion is deposited for coinage under existing laws.

All acts and parts of acts inconsistent with the provisions of this act are repealed.

(a) How was this bill amended in the Senate? Why? (b) Was the silver dollar a legal tender between 1873 and 1878? (c) What had been the findings of the silver commission appointed under the Act of August 15, 1876? [Report, March 2, 1877. Senate Report, No. 703, 44th Congress, 2nd Session.] (d) How did McKinley vote on this bill? When Hayes vetoed the bill how did McKinley vote on question of passing it over the veto? Were the votes on this measure partisan or sectional? (e) What provision was made for international bimetallism?

54. The Trade Dollar and the Price of Silver

Under the Act of 1873 the weight of the trade dollar was 420 grains, whereas the weight of the standard silver dollar was 412.5 grains. If free coinage of the latter had been allowed would it have been possible to keep the trade dollars in circulation? At what market price of silver would it have been profitable for the public to melt the trade dollars and have them coined into standard dollars? When the price of silver fell after 1873 why did the trade dollars circulate alongside the standard dollars? In 1876 the legal tender quality was taken from the trade dollars and free coinage of them was stopped: why were these two measures necessary? Is it feasible to use a coin in the foreign trade containing more pure gold or silver than the coin circulating in the domestic trade? if so, what advantages might be realized from this double system of coins?

55. Universality of Benefits of Free Silver

There sat a representative professor on political economy, at home when with his school boys, but powerless and confused in the presence of an adversary who courted his questions, but which he knew it was useless to propound.

"You do not enrich the people of the silver states one cent by the remonetization of silver," continued Coin, "except in common with the people of the state of Illinois, and of the whole United States.

"You increase the value of all property by adding to the number of money units in the land. You make it possible for the debtor to pay his debts; business to start anew, and revivify all the industries of the country, which must remain paralyzed so long as silver as well as all other property is measured by a gold standard."—[Coin's Financial School, 1894, p. 83.]

(a) Does the above declaration conform to the "quantity theory of money"? (b) "You increase the value of all property by adding to the number of money units in the land": in what sense is value used by Coin? Does the value of gold and silver rise too, along with all other things? (c) Will the increase of value be at the same rate for all things? If it were at the same rate, why argue for free silver?

56. Legal Ratios of Gold and Silver 1896

Country	Monetary System	Ratio between Gold and Full Legal Tender Silver	Ratio between Gold and Limited Legal Tender Silver
United States	Gold & silver	15.98	14.95
United Kingdom	Gold		14.28
France	Gold & silver	15.5	14.38
Germany	Gold		13.957
Belgium	Gold & silver	15.5	14.38
Italy	Gold & silver	15.5	14.38
Switzerland	Gold & silver	15.5	14.38
Greece	Gold & silver	15.5	14.38
Spain	Gold & silver	15.5	14.38
Portugal	Gold		14.08
Austria-Hungary	Gold		13.69
Netherlands	Gold & silver	15.625	15.00
Norway, Sweden and Denmark	Gold		14.88
Russia	Silver	15.5	12.90
Turkey	Gold & silver	15.875	15.875
Mexico	Silver	16.50	
Central American States	Silver	15.5	
Japan	Gold & silver	16.18	
India	Silver	15.00	
Canada	Gold		14.28

[Report of the Comptroller of the Currency, 1896, p. 28.]

(a) If free coinage were permitted in each country on a silver basis or on a gold and silver basis, to which country would it be most profitable to carry silver for coinage at this time? (b) Why is the "ratio between gold and limited legal tender silver" given a wider range of fluctuation than the "ratio between gold and full legal tender silver"? (c) How are the figures 15.98 and 14.95 computed for the United States? (d) Why are the ratios for France, Belgium, Spain, Switzerland and Greece the same? (e) Why are those for the Scandinavian countries the same?

57. Reduction of the Weight of the Subsidiary Coins

On December 8, 1919, Representative Platt introduced a bill into Congress providing as follows:

> That section 3513 of the Revised Statutes of the United States, as amended, be further amended, so far as it relates to the weight of the half dollar, the quarter dollar, and the dime, by striking out the words "twelve grams and one-half of a gram" and inserting in lieu thereof the words "one hundred and fifty grains troy," so that the sentence as amended will read: "The weight of the half dollar shall be one hundred and fifty grains troy."

(a) What was the occasion of this proposed legislation? (b) What happened to render the legislation unnecessary? (c) Had it been enacted would it have affected the market price of silver? Would it have forced Canada to enact similar legislation? (d) Would it be economical for the United States Government to pass such legislation now? Could it be passed with impunity? Why is it not passed?

58. Sources of Silver Bullion

The following quotation appeared in the press in November 1919:

> The Mint is in daily receipt of old knives and forks and spoons and other silver plate which were discarded, packed away in the attic and forgotten; the same is true of old jewelry and broken silver ornaments. These are first cast into the crucible and converted into bars which are assayed and their fine silver contents ascertained. The Mint pays the "official" price obtaining on the day the deposit is made, less a nominal charge for melting.

(a) Why was this practice prominent in November 1919? (b) What is meant by the "official" price? (c) What was done with the silver bought by the Treasury at this time?

59. The "Crime of 1921"

Examine the provisions of the Pittman Act. Note that the price of silver was held down during the war, to what may be regarded as a

non-profiteering basis. Note the price the United States Government procured for its silver, $1.015. Note the price it later paid to recoup the silver sold, $1.00. In 1921 it paid $1 per fine ounce for silver which it might, but for the Pittman Act restrictions, have procured in the market for about 60 cents.

(a) Justify the payment of a price for silver in 1921 higher than the prevailing market price for foreign silver. (b) Did the government lose anything by the operations under the Pittman Act? Did it gain? When the dollars were melted Great Britain paid the existing price for the copper alloy in the dollars, but the United States in recoining them paid the prevailing price for copper at the time. Make an estimate of the profit from this source. (c) What benefits accrued to India, and indirectly to the Allies, from the Pittman Act? (d) For what reasons should the United States have stayed rid of the silver dollars? (e) On the whole, is there justice in calling the silver purchases of 1921 the "crime of 1921"?

60. Hoarding of Silver—Speculating in Silver—Premium on Silver

An Order-in-Council was promulgated in Great Britain under the Defense of the Realm Act to the following effect in 1918:

1. No person shall after the twenty-seventh day of May 1918, have or retain at any time in his possession or under his control silver coins current in the United Kingdom of a value exceeding that of the amount of silver coinage reasonably required by him at that time for the purposes of the personal expenditure of himself and his family and of his trade or business (if any); and if any person acts in contravention of this regulation he shall be guilty of an offense against these regulations.

In any proceedings for contravention of this regulation the burden of showing what amount of silver is reasonably required for the purposes aforesaid shall rest upon the person charged.

2. Any person who sells or purchases, or offers to sell or purchase, any coin current in the United Kingdom for an amount exceeding the face value of the coin, or accepts or offers to accept any such coin in payment of a debt or otherwise for an amount exceeding its face value, shall be guilty of an offense against these regulations.

(a) What were the conditions of the times that made this Order-in-Council appear necessary? Did the rising price of silver feature as a cause for it? (b) Why should anyone pay for silver coin more than its face value, (1) if the face value at the time exceeded the market value of the silver bullion in it, and (2) if the market price of silver exceeded the mint price of silver? (c) Was the Order-in-Council a limitation on the operation of Gresham's Law?

61. Silver Coin Shortage in France

In 1919, in order to preserve her silver coinage, France published, in the official journal a new law providing a penalty of from ten days' to six months' imprisonment and a fine of from 100 to 5,000 francs for persons convicted of melting, recasting or otherwise demonetizing French specie, with the further penalty of confiscation of the metal seized. The Minister of Finance also issued a warning to travelers not to take out of France more than ten francs' worth of silver. These provisions were occasioned by the disappearance of silver money and the famine for small change. The following explanations of the dearth of silver coins were common in the press:

1. The metal in the coins was worth more than the face value of the coins.
2. Importers found it advantageous to pay for purchases in Switzerland with silver, for it commanded a premium over paper money.
3. Peasants were hoarding silver just as they formerly did gold.
4. Silver coins were carried to Switzerland and converted to bank notes at a profit.
5. The American soldiers were converting the French one- and two-franc silver coins into band rings and other souvenirs.
6. Foreign soldiers carried French coins back to their home countries.

(a) Which of these explanations are legitimate? (b) What fundamental underlying force was causing the coinage famine? (c) Cafés and shops began to issue metallic counters and paper change; these circulated in the community of the issuing café or shop: does this action illustrate Gresham's Law?

62. Effect of the War on Rupee Exchange and Coinage

I. The rupee weighs 180 grains, is 11/12 fine. How many rupees can be made from one United States silver dollar? If silver were selling at $1.29 per ounce what would the silver in a rupee be worth?

II. In 1893, owing to the decline in the value of silver bullion and of the rupee under free coinage, the mints of India were closed to free coinage, preparatory to establishing the gold standard. At that time the value of silver bullion was fluctuating around 75 cents per ounce, which made the bullion value of the rupee about 29 cents. After the closing of the mints, the price of silver fell still further, but gradually as the stock of rupees was absorbed the exchange value of the coin was stabilized at about 16d., and 1899 the government made the sovereign the standard coin of India, and fixed the value of the rupee

definitely at 15 to one sovereign, which gave it a value in the United States of 32.4 cents. Since 1893 the rupee has been a token coin, with the value of its silver contents worth less than its legal tender value.

As a result of the rise of the price of silver in the war period the following events, among others, occurred: (1) Its bullion value became more than 1/15th that of the sovereign; Great Britain shifted its legal status first to 14.5 to one sovereign, and later to still higher ratios. (2) The rupee really reinstated itself as the standard coin of India.

(a) Show that the system is an example of the gold exchange standard. (b) Is it an anomaly to adjust the value of the standard coin to that of the subordinate coin, as in this instance? (c) Why did they not call in the silver rupees and recoin them with smaller silver contents?

63. Compensatory Action of Bimetallism

(a) If the mint legal ratio of gold to silver is 16:1, why may the compensatory action force the market ratio to equal the mint ratio provided the market ratio is 14.5:1, but not when the market ratio is 10:1? (b) The commercial ratio differed from the mint ratio by only a few points for the three centuries preceding the demonetization of silver in 1873; does this constancy prove that bimetallism was successful during this period? (c) Calculate the market price of silver at which it becomes profitable to melt silver half-dollars at the present time in the United States. By how much does this price differ from the price at which it becomes profitable to melt silver dollars. (d) If the United States had bimetallism and gratuitous coinage of gold and silver at a mint ratio of 16:1, with the gold dollar weighing 24 grains, what would be the mint price of silver? If the market price of silver were $1.20 per fine ounce, what operations would occur? If the weight of the pure gold in the gold dollar were increased from 23.22 grains to 24 grains, how much would the mint price of silver be changed if the coinage ratio were 16:1?

64. Effect of Disparity of Mint Ratios

Gold goes where it finds its value, and that value is what the laws of great nations give it. In Mexico and South America, the countries which produce gold, and from which the United States must derive their chief supply, the value of gold is 16 to 1 over silver; in the island of Cuba it is 17 to 1; in Spain and Portugal it is 16 to 1; in the West Indies, generally, it is the same. It is not to be supposed that gold will come from these countries to the United States, if the importer is to lose one dollar in every sixteen that he brings; or that our gold will remain with us, when an exporter can gain a dollar upon every fifteen that he carries out. Such results would be contrary to the laws of trade, and therefore

we must place the same value upon gold that other nations do, if we wish to gain any part of theirs, or to regain any part of our own.—[Benton, Thirty Years' View, p. 436.]

(a) Why in 1834 did we adopt a ratio 16:1, which was above that of France and Great Britain? (b) In 1835 there were mints at Dahlonega, Ga., and Charlotte, N. C.: explain their location. (c) Would the adoption of the 16:1 ratio promote gold production in the United States?

65. Effect of Change of Mint Ratio on Purchasing Power

In 1834 Congress reduced the weight of the gold dollar from one-fifteenth of 371.25 grains to one-sixteenth, or from 24.75 grains to 23.22 grains, or about 7%. The ratio might have been changed similarly by increasing the weight of the silver dollar to 16×24.75 grains, or to 396 grains. Remembering that practically only silver coins had been minted from 1805 to 1834, which of the above methods of changing the mint ratio would, according to expectation, have resulted in a greater supply of coins and therefore a higher price level? The first method is said to favor debtors, the latter to favor creditors: show how.

66. Demonetization of Silver in 1853

We propose, so far as these coins are concerned, to make silver subservient to the gold coin of the country. We intend to do what the best writers on political economy have approved, what experience, where the experiment has been tried, has demonstrated to be the best, and what the Committee believe to be necessary and proper, to make but one standard of currency and to make all others subservient to it. We mean to make gold the standard coin, and to make these new silver coins applicable and convenient, not for large but for small transactions.

Another objection urged against this proposed change is that it gives us a standard of currency of gold only. . . . The constant though sometimes slow change in the relative value of the two metals has always resulted in great inconvenience and frequently in great loss to the people. Wherever the experiment of a standard of a single metal has been tried it has proved eminently successful. Indeed, it is utterly impossible that you should long at a time maintain a double standard. The one or the other will appreciate in value when compared to the other. It will then command a premium when exchanged for that other, when it ceases to be a currency and becomes merchandise. It ceases to circulate as money at its nominal value, but it sells as a commodity at its market price. This was the case with gold before the act of 1834, but it is now the case with silver. Gentlemen talk about a double standard of gold and silver as a thing that exists, and that we propose to change. We have had but a single standard for the last three or four years. That has been and now is, gold. We propose to let it remain so and to adapt silver to it, to regulate it by it.—[Speech of Chairman Dunham of the Ways and Means Committee of the House, *Congressional Globe*, XXVI, p. 190.]

(a) Did the Act of 1853 actually adopt the gold standard? Was silver made subsidiary to gold?

67. International Monetary Conference, 1881

Questions considered:

Has the fall of silver been hurtful to prosperity; is it desirable that the relation be made more stable?

Has the fall been due to increased product or to legislation?

Can stability be restored if a large group of states remonetize silver under unlimited coinage of full legal tender pieces?

If so, what measures should be taken to reduce fluctuation of the ratio to a mininum?

France and the United States finally joined in a declaration answering the questions practically thus:

That the fall of silver was injurious, and establishing a fixed ratio would be beneficial; international agreement for free and unlimited coinage of both metals at a fixed ratio would cause and maintain stability; the ratio of 15½ to 1 was most suitable; England, France, Germany, and the United States, with the concurrence of others, could by convention secure and maintain the stability of the ratio adopted.—[International Monetary Conference, 1881, House Misc. Doc. No. 396, 49th Congress, 1st Session.]

(a) What events had led to the calling of the second conference (the first being in 1878)? (b) How many countries were represented? who were our delegates? (c) What were the attitudes of England and Germany?

68. Bullion Value of Silver Dollars

(a) Under the limping standard as now in operation in the United States, at what minimum price of silver in the market would it become profitable to melt down silver dollars and sell them as bullion? to melt down subsidiary silver? Suppose the silver coins were worn down one-twentieth, at what price would it be profitable to melt them? (b) Under the limping standard as now existing in the United States, if the price of silver rose to $1.375 per fine ounce, would the number of silver dollars increase or decrease in circulation? would the effect be the same on the subsidiary silver? What effect, under these circumstances, would a seigniorage charge of 10 cents per dollar coined have?

69. The Proper Ratio of Coinage

The objection to independent bimetallism is that the parity between the two metals cannot be maintained at our ratio of 16 to 1. That is—the gold (23.2 grains) in the gold dollar will be worth more than the silver (371¼ grains) in the silver dollar. We have twice changed the quantity of gold in the gold dollar; each time making it less. If the commercial

value of 23.2 grains of gold is more than the commercial value of 371¼ grains of silver, then reduce it to 22, 21, 20 grains or less if necessary to put the two at a ratio, where the practical effect of free coinage, when once set to working again, will demonstrate that the ratio is at its natural point, and parity easily obtained. Reducing the gold in the gold dollar would leave gold for more dollars, and this would assist in establishing rising prices as it would multiply the number of dollars. The weight of the silver dollar should not be changed. Its integrity should be preserved as originally fixed.

There can be no objection to this plan, for as we have seen the parity of the two metals was maintained for hundreds of years. The bimetallists do not believe that the ratio has much influence. They believe that the influence of unlimited free coinage is so great in establishing the commercial parity of the two metals, that any ratio near the natural ratio of 1 to 15 2/3 will give satisfaction.—[Coin's Financial School, 1894, p. 141.]

(a) Does the above quotation conform to the "quantity theory of money"? (b) "The parity of the two metals was maintained for hundreds of years": were both metals in circulation all this time, or did they alternate with relative changes in the production of gold and silver? Were there conditions in the past which made the maintenance of the ratio easy, and new conditions now which make it impossible?

70. Relation of the Price of Silver to the Return of Bimetallism

In 1917 Senator Shafroth introduced the following resolution into the Senate:

Whereas, The settlement of balances of trade with silver using countries threatens the depletion of our stock of gold, although such countries prefer that such balances should be paid in silver; and

Whereas, The enormous expansion in world credits during the past three years necessitates the enlargement of the base upon which such credits are founded; and

Whereas, To relieve such condition it is necessary that the production of silver be increased; therefore, be it

Resolved, That the President be authorized to appoint a commission of three members to visit our allied and the neutral nations of the world with a view of making an international agreement as to the coinage of silver, subject to approval by Congress.

(a) What conditions made this a favorable time to press the restoration of bimetallism? (b) Why was an international agreement thought to be necessary? why could not the United States restore it alone? (c) In what ways did this resolution foreshadow the Pittman Act of 1918? (d) Was it logically true that because the volume of credits had been inordinately increased the metallic base ought to be increased? Is a reserve supposed to restrain the expansion of credit to some legal or expedient multiple of the reserve? Since most of the

countries had suspended specie payments, were gold reserves functioning and necessary?

71. Average Price of Silver Per Fine Ounce in New York Monthly, 1924-26

	1924	1925	1926
January	0.63781	0.68817	0.68107
February	.64652	.68846	.67108
March	.64293	.68175	.66223
April	.64403	.67245	.64760
May	.65860	.67915	.65389
June	.67045	.69452	.65789
July	.67497	.69769	.65106
August	.68865	.70550	
" 2			.63375
" 3			.63250
" 4			.63375
" 5			.62750
" 6			.61625
" 7			.61875
" 9			.62500
" 10			.62125
September	.69680	.71885	
October	.71168	.71421	
November	.69636	.69558	
December	.68459	.69236	

(a) Partly as a result of apprehensions concerning the Hilton Young Royal Commission on Indian Currency and Finance, the price of silver broke radically in August, 1926, as shown in the accompanying table. Why was this commission feared? (b) What provisions did this Commission make in their plans to prevent an adverse effect on the price of silver?

72. Hamilton's Coinage Plans

1. That the dollar, because it had been in actual use as the measure of values in practically all of the states, was the most suitable unit for the proposed system; that it was of the utmost importance to define as exactly as possible just what the dollar was, in order that neither debtors nor creditors might be injuriously affected. The dollars in existence varied considerably, Spain having degraded or changed the standard at different times. He therefore recommended a dollar containing 371.25 grains of pure silver, as best expressing the actual average value of the coin in use.

2. That the decimal system was of demonstrated superiority over the duodecimal of Great Britain.

3. That inasmuch as the undervaluation of either metal would cause its exportation, thus shifting the standard to the other, which might result injuriously, and since it was very desirable to have coins of both metals in actual use, the ratio should conform as nearly as possible to the commercial ratio, rather than follow any specific European precedent. He therefore recommended the ratio of 15 to 1.

4. That the silver dollar was the equivalent of 24.75 grains of gold, and therefore a gold dollar containing that quantity of metal be also provided for, in order that there might be a unit coin in each metal.

5. That the fineness of the coins should be eleven-twelfths or .916 2/3, corresponding with the British standard of fineness for gold; the alloys being for gold coins, silver and copper; for silver coins, copper only.

6. That no mint charge should be imposed upon the bullion brought for coinage, the cost thereof being properly a general charge rather than one to be imposed upon specific individuals, and to impose a charge might influence prices in international relations, being in effect a reduction of the standard of the coin, as compared with bullion.

7. That foreign coins should be permitted to circulate for one year, that thereafter certain foreign pieces might be tolerated for another year or two; anticipating that the mint would be prepared to provide all the coin needed, he concluded that after three years the use of foreign coins should be prohibited.—[Hepburn, History of Currency, rev. ed., 1924, pp. 41-2, The Macmillan Co., New York, by permission.]

(a) Why was it regarded advantageous to choose a coin (or model the new coin upon a coin) already in circulation? (b) Give examples of the advantages of the decimal over the duodecimal system. (c) Why should the mint ratio chosen conform as closely as possible to the commercial ratio? (d) What were Hamilton's objections to a brassage charge? Are there any advantages from making a small brassage charge? (e) In the above plans what was Hamilton's greatest error?

73. Depreciation of the Continental Currency

In January, 1777, depreciation was so great that Congress appealed to all States to make Continental money legal tender for public and private debts and that refusal to accept such money should extinguish the debt. They asked the States to call in and "sink" their State currency in order to appreciate the currency of Congress; and as the States were committed to the redemption of Continental currency in proportion to population, the requests of Congress were generally complied with.

Congress, in the year 1778, appealed to the States to raise $5,000,000, by taxes, and pay the same into the Continental Treasury, and again asked them to sink their State issues, saying among other things, "no truth being more evident than that where a quantity of money of any denomination exceeds what is useful as a medium of commerce, its comparative value must be proportionately reduced."—[Phillips, II, 76.]

The States complying with the requests of Congress undertook to fix the price of labor, the charges of innkeepers, the price of articles manufactured or imported, indeed of everything except military stores. The winter at Valley Forge was succeeded by a spring of great gloom, until news of the alliance with France arrived; this put great heart and courage into the Americans. The volume of Continental currency at this time was $55,500,000 and had depreciated to six for one in April. Upon news of this alliance in May, it appreciated to four for one. More issues and more depreciation followed, and in 1779 the Continental currency totaled

$130,052,080. Congress realized that more paper issues would depreciate the existing issue to an amount greater than the proposed issue would realize, but Congress could not levy taxes; it could only apportion these among the States and ask them to raise the amount by taxation, which the States neglected to do.

The tax that the people suffered, by loss from depreciated paper, was far greater than a direct tax of the amount necessary to carry on the war would have been. Public meetings in Philadelphia, Boston and elsewhere, and meetings of different military organizations, violently denounced the constantly soaring prices of the necessaries of life and constantly depreciating currency, and charged it all to the extortionate greed of the people who would not sell and take the current paper money at its face value.—[Hepburn, History of Currency, rev. ed., 1924, pp. 15-16, The Macmillan Co., New York, by permission.]

(a) Was it a logical system for the States to "sink" the Continental currency in proportion to their respective populations? What economic and social conditions made that a relatively just apportionment? (b) ". . . quantity of money of any denomination exceeds what is useful as a medium of commerce. . . .": is the quantity that is useful as a medium of commerce a definite measureable amount? Was the Congressional statement a fair and complete statement of the quantity theory of money? (c) Why did the announcement of the French alliance stop the depreciation of the continental currency for the time being?

74. Tobacco Warehouse Receipts as Money in Colonial Virginia

The tobacco warehouses, of which there are a number in Virginia, are under the direction of public authority. There are inspectors, nominated to prove the quality of the tobacco brought by the planters, and if found good they give a receipt for the quantity. The tobacco may then be considered as sold, those authenticated receipts circulating as money in the country. For example, suppose I have deposited 20 hogsheads of tobacco in Petersburg, I may go fifty leagues thence to Alexandria or Fredericksburg and buy horses, clothes or any any other article with those receipts, which circulate through a number of hands before they reach the merchant who purchases the tobacco for exportation.—[Winthrop, Vol. 1, p. 220.]

(a) Why in Virginia should tobacco be adopted as money? Why, if they wanted to use tobacco as money, did they use warehouse receipts instead of tobacco itself? (b) How did the problem of evaluation of tobacco affect its use as money? Would the problem have been changed if the colony were on a strictly barter economy? (c) Why under the federal reserve system can tobacco warehoused be made the basis of federal reserve notes for monetary circulation successfully, whereas the tobacco warehouse receipt currency of the colony Virginia was not successful? Bring out the fundamental necessities of a system of currency of this kind based on commodities stored.

75. Shinplasters

In my last report I called the attention of Congress to the issue of bills of credit by the State of Alabama. . . . and also to the issue of unauthorized currency by various corporations in the South. . . . The issue of such unauthorized currency is increasing in various directions. Railroad corporations in the Southern States have been issuing for some years past, notes for circulation, of different denominations, many of which are similar to the following:

Savannah, Ga.:FARE-TICKET.X.

$10. Central Railroad Bank.

Good for the fare of two passengers one hundred and twenty-five miles. The Central Railroad and Banking Company of Georgia.

Savannah, Dec. 1, 1871.

.....Superintendent. .....President.

I am informed that these issues are redeemed by the railroad company, and that quite extensive arrangements are being made by manufacturing companies and corporations to issue similar devices. Such circulation is also being issued by the mining corporations of Lake Superior, and by "Zion's Commercial Co-operative Institution" in Salt Lake City. Similar issues are also made for circulation in the State of Maine, which purport to be drawn on (or by) parties residing at Saint Stephen, New Brunswick.

(a) Had the State of Alabama the constitutional right to issue bills of credit? (b) Are shinplasters of the above character properly called money? Is a railroad ticket which circulates freely, from design or otherwise, a form of money? (c) Consider the following items as possible causes of the use of shinplasters at this time: (1) habit acquired during the Civil War; (2) the 10% tax on state bank note issues and the dearth of national banks in certain sections; (3) the disturbed currency—the panic of 1873, the fluctuating value of the greenbacks. (d) In what type of region is the use of shinplasters most likely to arise? (e) What fiscal, monetary, and economic objections are there to the local use of shinplasters?

76. Attitude of England Toward Colonial Paper Money

In 1763 Parliament passed a law forbidding any bills of credit to be made legal tender, hoping thereby to stem the tide of inflation that had possessed all the colonies. (Gauge, Paper Money, II, p. 23.) Private individuals and firms throughout the colonies had, to some extent, issued promissory notes payable on demand and attempted, with indifferent success, to circulate them as money. In 1766 an association of merchants in Philadelphia sought to meet the alleged demand for circulation by emitting £20,000 in £5 notes, with interest at 5 per cent. This action was not in contravention of any law but was frowned upon generally and presently abandoned.

Realizing the danger from unrestrained inflation, Parliament enacted, in 1763, a law "to prevent paper bills of credit, hereafter to be issued in any of His Majesty's colonies or plantations in America, from being de-

clared to be a legal tender in payment of money, and to prevent the legal tender of such bills as are now subsisting from being prolonged beyond the periods for calling in and sinking the same." (Phillips, II, p. 24.)—[Hepburn, History of Currency, rev. ed., 1924, pp. 10-12, The Macmillan Co., New York, by permission.]

(a) What economic and social conditions in the colonies made resort to paper money schemes most likely? (b) Could the Parliamentary prohibition of making any bills of credit a legal tender have prevented the evils of monetary inflation? (c) What was the attitude of the Colonies toward this law as shown in the Declaration of Independence?

77. Pennsylvania Colony Paper Money

In March, 1723, Pennsylvania passed an act for the emission of £15,000 in bills of credit, the argument being that "the government is bound to supply a circulating medium for traffic, for those who are its dependents," and the fact being that the community were suffering for want of a good currency. Previously the Committee on Grievances had referred to the House the question "Whether the raising the cash or striking paper money will be most to the advantage of the Province? But humbly presume if dollars were raised to *five shillings* a piece, it might be of benefit, and they think it would be impracticable to prevent the exportation of specie; they are of opinion, that if a law was made to make the country produce, at market price, pay for servants, goods imported, and to discharge judgments and executions, it would be of public service." (Phillips, Paper Currency, I, p. 12.) A law was passed in accordance with this report, in February, 1723.

The £15,000 in bills were to be loaned at 5 per cent interest on real estate or upon silver plate, at 5 shillings per ounce, to be deposited at the loan office. The notes were payable, one-eighth of the principal annually, together with interest; they were a full legal tender; refusal to receive them as such voided the debt or forfeited the commodity. This issue was very conservative in amount. The notes were well secured and were of great service to the community. The legislature of Pennsylvania had before it the unfortunate experience of other colonies, and was at the time flooded with their depreciated notes.

In 1726 the amount of currency was £45,000. These notes passed at par and their very excellence attracted counterfeiting; they were counterfeited to an alarming extent, chiefly in Ireland, and sent hither; all this was done notwithstanding the act provided that counterfeiting should be punished by the loss of both ears, by a fine of £100 and the payment of double the value of the loss sustained by those who suffered from the counterfeits. In case of inability to pay these sums, the offender was sold into service for seven years. (Phillips, I, p. 16.)—[Hepburn, History of Currency, rev. ed., 1924, pp. 7-8, The Macmillan Co., New York, by permission.]

(a) What is meant by "raising the cash"? by "striking paper money"? (b) Was the report logical in thinking debasement of the coins would have caused the exportation of the specie? Would the

issue of commodity paper money have the same effect? (c) Was the success of the Pennsylvania scheme due to the fact that the notes were made legal tender? were well-secured? were limited in amount? were amortized annually?

78. Character of Bank Notes in '50s

The following statement illustrates the condition of the currency from the detector's point of view:—

	1856	1862
Number of banks reported	1,409	1,500
Number whose notes were not counterfeited	463	253
Number of kinds of imitations	1,462	1,861
Number of kinds of alterations	1,119	3,039
Number of kinds of spurious	224	1,685

This does not include notes in circulation of suspended banks, whose value was so doubtful pending liquidation that the discounts thereon were always heavy.—[Hepburn, History of Currency, rev. ed., 1924, pp. 165-6, The Macmillan Co., New York, by permission.]

(a) What was a "bank note detector"? (b) "We would expect that a free, self-governing, and, at times, obstreperous, people would have refused and rejected these notes with scorn, and would have made their circulation impossible, but the American people did not." [Sumner] Why not? (c) "It had become the habit of bank officers and others to regard the presentation of notes for *redemption* in specie as an act to be reprobated, manifesting a desire to injure the bank and through it the community where it was located." Under what conditions could and would this attitude grow up? Is there any objection to having such spirit prevail?

79. Issue of Paper Money under the Constitution

Articles of Confederation were adopted November 15, 1778, and gave Congress coordinate power with the states to emit bills of credit, but no power to levy taxes. Sad experience wrought a rapid revolution in public sentiment, and the new constitution which was adopted and went into effect in 1789, forbade any state to coin money, emit bills of credit or make anything but gold and silver coin a legal tender. This was the beginning of a better condition of finance. State issues soon disappeared, and Continental bills as well. They were called in by fixing a date after which they should be of no value; in the meantime they could be refunded into various state or national obligations provided for such purpose by laws of the states and of Congress.—[Hepburn, History of Currency, rev. ed., 1924, p. 19, The Macmillan Co., New York, by permission.]

(a) Bring out the essential differences in the systems of monetary control provided under the Articles of Confederation and the new Constitution. (b) Who in the Constitutional Convention were the

chief exponents of consolidation of money issuing powers in the Federal Congress? of the assumption of the State Debts by the United States? (c) At what rates were the Continentals redeemed in United States money?

80. Revaluation of Continental Currency Act of July 28, 1780

Resolved, That the principal of all loans that have been made to these United States, shall finally be discharged by paying the full current value of the bills when loaned; [not face value, but market value at time of issue] which payment shall be made in Spanish milled dollars, or the current exchange thereof in other money, at the time of payment. That the value of the bills when loaned, shall be ascertained for the purpose above mentioned, by computing thereon a progressive rate of depreciation, commencing at the first day of September, 1777, and continuing to the 18th day of March, 1780, in geometrical progression and proportion to the time, from period to period, as heretofore stated, assuming the depreciation at the several periods to be as follows: On the first day of March, 1778, one dollar and three-quarters of a dollar of the said bills for one Spanish dollar; on the first day of September, 1778, as four of the former for one of the latter; on the first day of March, 1779, as eighteen of the former for one of the latter; and on the eighteenth day of March, 1780, as forty of the former for one of the latter, etc., etc., etc.

(a) In this scheme of revaluation what are the assumptions as to time and rate of depreciation? (b) In the debates on this legislation it was argued that it was "criminal folly" to redeem the notes at any figure above their current value: do you agree?

81. Denominations of Paper Money

The Act of 1878 authorized the issue of silver certificates in sums of not less than ten dollars. The Act of 1887 authorized the issue of one, two, and five-dollar certificates. The Act of 1900 runs as follows:

That hereafter silver certificates shall be issued only of denominations of ten dollars and under, except that not exceeding in the aggregate ten per centum of the total volume of said certificates, in the discretion of the Secretary of the Treasury, may be issued in denominations of twenty dollars, fifty dollars, and one hundred dollars; and silver certificates of higher denominations than ten dollars, except as herein provided, shall, whenever received at the Treasury or redeemed, be retired and cancelled, and certificates of denominations of ten dollars or less be substituted therefor, and after such substitution, in whole or part, a like volume of United States notes of less denomination than ten dollars shall from time to time be retired and cancelled, and notes of ten dollars and upwards shall be reissued in substitution therefor, with like qualities and restrictions as those retired and cancelled.

(a) What were the purposes of the changes of law with regard to the denominations of the silver certificates and greenbacks? (b)

Should the convenience of the people determine the denominations of the paper money? How is it possible to force the circulation of a type of paper money by fixing the denominations of it? (c) The danger of the greenbacks to the United States Treasury increased as the denominations were made larger: why? (d) In the period of this legislation the greenbacks tended to be lodged in banks and the silver certificates to circulate: give reasons.

82. Issue of Silver Certificates Against Bullion

Some writers have suggested that a circulating medium might be based upon bullion, both gold and silver; and the Comptroller is of the opinion that under certain restrictions and regulations it would be far more correct in principle to issue silver certificates based upon a deposit of silver bullion, to be valued in the exact proportion of silver to gold, than to continue the issue of silver certificates under the present law. If this were done, silver bars might be stamped at their market value and held in the Treasury for the redemption of the certificates, which should call an amount of silver equal in value to their nominal or face value expressed in gold. The bullion represented by certificates should be periodically valued at its market price in gold, and a certain proportionate amount of silver so held might, perhaps, be coined to provide the means for redemption of the certificates, if redemption was desired for business purposes. These dollars should be in the nature of a subsidiary coin and should be reconvertible into bullion certificates.—[Report of the Comptroller of the Currency, 1884, 21.]

(a) Discuss the feasibility of this scheme. (b) At this time the silver in the silver dollar was worth approximately 85 cents. Why did the Comptroller regard the bullion certificates "far more correct in principle"? (c) Would these bullion certificates be in the nature of warehouse receipts for fungible or non-fungible goods? of a general or special deposit? (d) If the bullion were periodically revalued, as suggested, what would be the amount of bullion in which the certificate would be redeemed? (e) Why should the dollars coined from this bullion be regarded as "subsidiary coin"? (f) Would this scheme make the purchasing power of the certificates stable? Would it tend to keep the price of silver higher?

83. Repudiation of Public Debt

Resolved, That exemption from tax of over $2,500,000,000 Government bonds and securities is unjust to the people, and ought not to be tolerated, and that we are opposed to any appropriation for the payment of the interest on the public bonds until they are made subject to taxation.

That the claim of the bondholders that the bonds which were bought with greenbacks, and the principal of which is by law payable in currency, should, nevertheless, be paid in gold, is unjust and extortionate, and if persisted in will force upon the people the question of repudiation.

That we denounce the national banking system as one of the worst

outgrowths of the bonded debt, which unnecessarily increases the burden of the people $30,000,000 annually, and that we demand its immediate repeal.—[Democratic State Platform, 1869.]

(a) Is each of the above three declarations a form of repudiation of the debt? (b) Are the principles here impeached accepted principles of public finance? how is each defended? (c) What had been the record of the Democratic Party on debt payment?

84. Money Based on Labor

J. R. Sovereign, Master Workman of the Knights of Labor, who had a seat on the platform, now asked a question:

"You have given us the theory and science of money," said Mr. Sovereign, "as based on *property*. I want to know if it is practical to issue a form of credit money based on *labor?*"

"Yes," said COIN, "It is practical, and, to the extent to which it could be brought into use, would be on a parity with other forms of money based on property.

"Suppose the government owned and controlled all the railroads—it could issue paper money redeemable in services. That is, it would be good in the payment of freight and at all the ticket offices.

"If the passenger and freight business of the country amounted to $1,100,000,000 a year, which is the case at present, then that amount of paper currency thus redeemable could be safely kept in circulation. The supply would have to be limited—so that confidence would be maintained in the ability of the government to redeem it, in a reasonable time, if called upon so to do.

"This would be credit money redeemable in labor. It should also be made legal tender, and differ in no respect from credit money redeemable in property—silver and gold—except as to the nature of redemption.

"Naturally it would circulate side by side with the other form of credit money, inside of the United States, and in the payment of freight and purchase of transportation, no discrimination would ordinarily be made in the form of money used.

"If confidence in the existence of the government should be shaken by wars or disintegration, as such a danger arose, this form of money would be assorted out from the other and redemption could take place, and no one would suffer by it.

"It would be as sound a currency as credit money based on property.

"It would be put in circulation by the government paying it out to its employes.

"The postage stamp is based on the principle of redemption in services, but is not issued in suitable form for currency, and yet it is frequently used in small remittances in letters as such.

"A form of credit money could now be issued resembling our paper bills, redeemable in postage stamps."

"How much?" asked Mr. Sovereign, whose face had worn a broad smile during the answer to his previous question.

"The total annual postal business," said COIN, "of the government for last year was about $75,000,000. This amount would circulate at par, with other money—how much more I would not now undertake to say. It would

be redeemable in postage stamps, just as the other would be redeemable in railroad passenger tickets, or receipted freight bills.

"This would be money based on labor."—[Coin's Financial School, 1894, p. 78.]

(a) Is script that is acceptable for payment of freight and passenger services money? Is it right to say it is redeemable in, or is based upon, labor? (b) Criticize Coin's method of estimating the maximum amount of such script issuable by the government. (c) Coin advises that the amount of such script would have to be limited so that the confidence might be maintained that the government would be able to redeem it, in a reasonable time, if called upon to do so: how only could the government redeem it? The greater the amount outstanding the longer before the government could redeem it: would its depreciation be proportional to this period? Would suspension of redemption be possible? How would depreciation be expressed? (d) In Bellamy's "Looking Backward" the laborers are paid in script which entitles them to produce at the common warehouse: is this script money? Is it payable in services or property?

85. Substitutes for Money

The character of the receipts by the national banks in 1892 September 15 was as follows:

Character of Receipts	All National Banks (Per cent of total)	National Banks of New York City
Gold coin	0.88	0.07
Silver coin	.41	.04
Gold Treasury certificates	1.03	2.18
Silver Treasury certificates	1.97	.65
Legal tenders	2.58	2.23
Treasury notes	.81	1.18
National bank notes	1.04	.24
U. S. certificates of deposit for legal tenders	.67	1.05
Checks, etc.	46.79	28.43
Clearing house certificates	.81	.00
Exchanges for clearing house	42.83	63.93
Miscellaneous	.18	.00
	100.00	100.00

(a) From the above it appears that 9.39% of the bank transactions were represented by actual cash for all the banks, and 7.64% of the New York bank transactions, and the remainder by substitutes for money. Why should the percentage be lower for New York than for the country as a whole? (b) In your opinion do the above percentages also represent the proportions of general business—in commerce and industry—done on a cash basis? (c) Does this table show that it is "impossible for the Government to furnish a volume of currency suffi-

cient to meet the wants of the people at all times" and that it "is impossible for the remaining 10 per cent of money to carry on the business of the country without monetary stringency and financial distress"? (d) The percentage of checks, etc., received in New York national banks in September 1881, was 98.80; in September 1890, 95.64; and in September 1892, 92.36. This decrease brought the percentage very near the average for the whole country. What were the reasons for this downward tendency? Did the tendency persist after 1892?

86. Legal Tender Act of February 25, 1862—Position of Various Parties

This measure caused much discussion, both in and out of Congress. There was no precedent for, and apparently every reason against, constituting the notes money and making them legal tender. Lincoln and Chase very reluctantly accepted it as a necessary evil. The Committee on Ways and Means was evenly divided on the question of favorably reporting the bill. Thaddeus Stevens (the Republican leader in the House), Spaulding, and others of the dominant party, declared the measure warranted only by the necessities of the war, *the saving of the Union.* Nevertheless such Republicans as Morrill, of Vermont, and Conkling, and nearly all the Democratic representatives, led by Pendleton and Vallandigham, opposed it as unnecessary, inexpedient, and unconstitutional. In the Senate, Fessenden, Sherman and Sumner gave reluctant assent, the first named opposing and voting in favor of omitting the legal tender clause. Among those afterwards prominent in currency legislation who favored the bill were Windom, Kelley, Hooper, Morrill (Me.); and among the opponents, Morrill (Vt.), Cox, and Holman. The bill passed the House by a vote of 93 to 59; in the Senate the legal tender clause was retained by a vote of 22 to 17, and the bill passed by 30 to 7, only 3 Republicans voting nay.—[Hepburn, History of Currency, rev. ed., 1924, p. 186, The Macmillan Co., New York, by permission.]

(a) Why were the first issues of circulating notes [Act of July 17, 1861] not made legal tender? (b) Chase said he "had a great aversion to making anything but coin a legal tender in payment of debts. It has been my anxious wish to avoid the necessity of such legislation. It is, however, at present impossible, in consequence of the large expenditures entailed by the war, and the suspension of the banks, to procure sufficient coin for disbursements, and it has, therefore, become indispensably necessary that we should resort to the issue of United States notes." In the light of the facts known then or now was the measure necessary? (c) Morrill declared the proposal was "immoral." Why should this adjective be attached? (d) Why did some statesmen hold the act was unconstitutional? Was this the prevailing opinion among the Congressmen who passed the act? (e) Did Chase later condemn his own act in advocating legal tender notes?

87. Lincoln on the Legal Tender Notes

The suspension of specie payments by the banks, soon after the commencement of your last session, made large issues of United States notes unavoidable. In no other way could the payment of the troops, and the satisfaction of other just demands, be so economically or so well provided for. The judicious legislation of Congress, securing the receivability of these notes for loans and internal duties, and making them a legal tender for other debts, has made them a universal currency; and has satisfied, partially, at least, and for the time, the long-felt want of an uniform circulating medium, saving thereby to the people immense sums in discounts and exchanges.

A return to specie payments, however, at the earliest period compatible with due regard to all interests concerned, should ever be kept in view, Fluctuations in the value of currency are always injurious, and to reduce these fluctuations to the lowest possible point will always be a leading purpose in wise legislation. Convertibility, prompt and certain convertibility into coin, is generally acknowledged to be the best and surest safeguard against them; and it is extremely doubtful whether a circulation of United States notes, payable in coin, and sufficiently large for the wants of the people, can be permanently, usefully, and safely maintained.—[Messages of Presidents, Vol. II, December, 1862.]

(a) List the various services which Lincoln cited for the legal tender notes. (b) Were his apprehensions as to fluctuations of their purchasing power, the early return to specie payments, and the possibility of maintaining convertibility, warranted by succeeding history? (c) What substitute for the legal tender notes did Lincoln advocate?

CHAPTER III

CREDIT AND CREDIT INSTRUMENTS

88. The Use of Credit

The great credit-machine will work very much as it does in the actual world. An order is given by a merchant to a manufacturer to supply a certain quantity of goods. The manufacturer borrows from his banker a sufficient credit to meet the necessary expenses of manufacture, including the cost of raw material, for the period which will intervene before the goods can be delivered and payment received from the merchant. When the goods are delivered the merchant in turn borrows their value for the period for which they are likely to be on his hands. The goods may pass from one manufacturer to another, and from one dealer to another, several times before they are finally disposed of piecemeal by the retail dealers to the consumers. Each manufacturer or dealer will probably be indebted for a part at any rate of their value, so long as he holds them. (A debt, as it were, is attached to the goods so long as they are being *dealt* in—that is to say, bought with a view to being sold. This debt is only finally paid off when the goods are sold, not to be dealt in, but to be *consumed*. But each manufacturer or dealer is quit of the debt when he is quit of the goods. He borrows to meet the expense of making or buying the goods, uses the proceeds of his borrowing to pay the people employed in manufacturing them, or to defray the purchase price; then, when he disposes of them, applies the proceeds to pay off the sum borrowed, and retains any balance as his own profit. Thus *new credits*, as distinguished from those created merely in replacement of old ones, are created to pay the profits, remuneration, interest, etc., of those who contribute, either by their personal services or by the use of their property, to production.—[R. G. Hawtrey, Currency and Credit, sec. ed., 1923, p. 7, Longmans, Green and Co., New York, by permission.]

(a) Does this give a clear idea of the use of credit? Criticize. (b) Compare the idea expressed here with that found in your text or readings. (c) What is meant by "new credits"?

89. Elements of Credit

I. How is the credit title of the applicant borrower affected by each of the following elements:

(a) Life insurance carried by applicant. (b) Property insurance carried by applicant. (c) The fact that he had gone through bankruptcy court in 1908. (d) The length of the loan wanted. (e) His ability to offer collateral security. (f) His ability to offer industrial bonds instead of railroad stocks as collateral. (g) The fact that Mr.

X is willing to indorse his note but that the A.B.C. Surety Co. asks an unusually high premium for a bond for him. (h) The fact that he plans to use the fund for purchasing iron ore rather than for erecting an extension to his plant. (i) The fact that the general price level is falling. (j) The fact that he carries an account at a competing bank?

II. Explain the following phrases found in the usages of commercial instruments: (a) "Joint and several note." (b) "Accommodation indorser." (c) "Guarantor." (d) "Indorsement without recourse." (e) "No protest." (f) "Waiver of notice." (g) "Non-negotiable instrument." (h) "First of exchange, second being unpaid." (i) "Documentary payment bill." (j) "Restrictive indorsement."

90. Nature of Credit

I. Classes of credit: (a) Is a mortgage a blessing or a curse to the debtor? Is popular opinion changing in this regard? (b) Can a farmer who mortgages his farm to raise funds for stocking and equipping his farm justly claim more sympathy from the financial public than a railroad company which sells mortgage bonds to raise funds to equip its road? (c) In an amortization loan the security increases as maturity approaches: explain how. (d) Which is the better investment, a farm-mortgage bond or a direct mortgage? (e) To which type of cooperative marketing association does a bank prefer to lend, one with capital stock or one without?

II. Nature of bank credit: Options—(1) That no banker can make an additional loan until an equal amount has been deposited with him. (2) That when a bank makes a loan it immediately creates a deposit, and that it may go on creating deposits provided it can count upon sufficient cash reserve. (a) Which of these conceptions arose first historically, and why? (b) Where does the truth lie with respect to these opposing conceptions?

91. Nature of Credit Extensions

The volume of liquid capital consists of the stock of goods and services which go to satisfy the needs of workers, organizers and capitalists during the period lapsing between the expenditure of these persons' efforts and the sale to an ultimate consumer of the goods which these various efforts have served to produce. This actual stock of goods and services the banks can obviously not increase or decrease. What they can do is: (1) To redistribute the proportion of their total resources lent and that kept as cash reserve, thereby increasing or decreasing the volume of credit accommodation at the disposal of their customers. (2) By trading on their own reputation and stability they can, within a limited degree, expand their loans. They are in so far superior to the ordinary individual who obviously cannot lend what he does not possess, because they can provide means of payment —either by their own notes or cheques drawn on them—that will circulate

readily. But, in effect, when a bank makes advances, either on the strength of its own notes or of cheques drawn on itself, it increases, not the volume of real liquid capital, but the claims to it that are in existence, and it thus tends to diminish the value of each individual unit of such claims. The bank, therefore, in so far as it creates new credit, would borrow forcibly from all holders of claims to goods and services and would lend the amount so borrowed.

(a) Is this a correct and full conception of the relation of credit and wealth? (b) Is the division of capital into stock of *goods* and *services* logical? (c) What is the essential difference, as regards credit, between a banker and a retailer?

92. Banks Not Creators of Credit

It has indeed been argued that every loan by the banks creates a deposit; that so long as the banks go on increasing their loans, so long will their deposits grow in the same degree, and that thus the banks can be regarded as creating credit. Unfortunately this theory will not stand confrontation with facts. Reference to table will show at once that the course of events in the first half of the year 1925 gives a decisive answer to this hypothesis. The months in question show a marked growth in the item of Loans and Advances to Customers, amounting in the aggregate of the "Big Five" balance sheets to as much as £29,525,000.

AGGREGATE AVERAGE WEEKLY FIGURES OF "BIG FIVE" FOR FIRST SIX MONTHS OF 1925

	Current and Deposit a/cs	Loans and Advances	Discounts	Investments
January	£1,514,631,000	£745,859,000	£235,289,000	£266,501,000
February	1,502,293,000	748,639,000	225,172,000	258,071,000
March	1,470,692,000	765,443,000	195,239,000	254,316,000
April	1,472,197,000	771,461,000	184,024,000	249,646,000
May	1,466,779,000	773,257,000	192,884,000	246,680,000
June	1,489,848,000	775,384,000	197,929,000	240,422,000

[Leaf, Banking, pp. 102–3, Henry Holt & Co., New York, by permission.]

(a) Does the table prove the contention of the author? (b) Did the banks "create credit" to make the additional "loans and advances," or did they "contract their discounts" and "sell their investments"? if the latter, where did the loan funds come from? (c) "The State is a creator of credit . . . . it can . . . . create paper currency to an unlimited extent . . . . [and] by making it legal tender can force it into the hands of everyone to whom it owes money." Does the unrestricted issue of legal tender paper money likewise clothe the central bank with power to "create credit"? (d) "The banks can lend no more than they can borrow—in fact not nearly so much." Defend or criticize this proposition.

93. "Kiting" of Credit

The competition for bank accounts among banks in reserve cities is so intense that "promoters" find it easy to establish a bank, open an account with their reserve-agent bank in some city, and the president or cashier secures from such reserve-agent bank a loan upon his stock as collateral. By opening several such accounts the entire stock in some instances is used as collateral, and these "promoters" need but the 10 or 20 per cent margin required (in other words, $5,000 or $10,000) in order to start a bank. The opening of such accounts and making of such loans are coincident in point of time, or so nearly so that the creditor bank must know that they are furnishing capital with which to float the new enterprise.

(a) What is meant by "kiting"? (b) Why are national banks forbidden to loan on the security of their own stocks? Where parties organize a series of banks does this prohibition accomplish its end? (c) What is meant by "syndicate" banking? by "chain" banking? What is the purpose of each? (d) Does the above type of operation lead to the founding of too many banks? to the founding of weak banks? (e) How does the Comptroller of the Currency try to prevent the establishment of excessive banks?

94. Risk in Loans

(a) Are the risks inherent in the nature of the industry greater in farming than in manufacturing, so that a banker takes special precautions in loaning to a farmer that he does not in loaning to a manufacturer? What factors are increasing the risk of farming? what ones are decreasing it? (b) Is the higher rate of interest prevailing in agricultural regions due to higher risk, restricted supply of capital, monopolistic banking conditions in the locality, excessive demand for loans in such regions, the want of business knowledge on the part of the farmer on how to procure capital, the lack of organization of rural credit, or what? (c) Is it possible to adjust interest rates on loans at the time of making them so that the lender is equably protected against a rising level of commodity prices? What, in fact, is done in this regard? (d) Assuming that the business cycle during the past 15 years has averaged 40 months: how has the lender of funds for 1, 2, 3, and 4 years, respectively, fared with respect to changes of price level?

95. New York Bill of Credit in 1709

1709—June 8
Amount £5,000

Form: This indented Bill of .....Shillings due from the Colony of New York to the Possessor thereof, shall be, in Value equal to Money; and shall be accordingly accepted by the Treasurer of this Colony, for the time being, in all publick payments; and for any Fund at any Time, in the

Treasury. Dated, New York, Thirty-first of May, One Thousand Seven Hundred and Nine; by Order of Lieutenant-Governor, Council and General Assembly, of the said Colony.

Signed by Lawrence Reade, Robert Walters, John Depeyster, and Robert Lurting, or any three of them.

Description: Indented at the top, . . . dated, . . . the arms of the city of New York on the left side, towards the bottom

Number and division of the bills:

400 bills,	each of	£5
600	"	40 shillings
600	"	20 "
1,000	"	10 "
2,800	"	5 "

Currency limited to May 31, 1711.

Commissioners for canceling, the signers and treasurer.

Number canceled not known.

[J. H. Hickcox, History of Bills of Credit, pp. 53-4, Albany, N. Y., 1866.]

(a) What is a bill of credit? Was this New York bill of credit money? (b) Was this redeemable in any particular form of money? (c) What was the underlying security of this bill? (d) What is meant by the statement "Currency limited to May 31, 1711"?

96. Credit and Money

Barter was the first method of effecting exchanges and this was superseded by the adoption of money as an intermediary element or medium of temporarily storing up the value of goods until re-exchanged for other goods. This system is dependent upon the previous actual and positive accumulation of wealth before the exchange into money could be accomplished. The economic fact of existence of wealth was a pre-requisite to the use of money. To make an exchange into money the being of actual goods was necessary at the early state of the development of money. These goods were also goods ready for consumption, not process goods.

As the world developed still further from an agrarian to a trading and later to a manufacturing organization of society, other changes of proportions became economically necessary to support the volume of business for a monetary standpoint.

Taking these points all into consideration the following seems a reasonable definition: Credit is the power to secure the present transfer of wealth, measured by dollars or other monetary standard, through a promise to pay at a future time, based on the confidence of the seller in the ability and willingness of the buyer to meet his obligations as agreed to by him.

Since its first development credit has grown increasingly important in the sustention of business activity. It is probable that less than ten per cent of the exchanges of goods in this country is now actually settled for at the time of exchange by an equivalent transfer of physical goods.

The most sensitive part of the medium of exchange is that part which is based on credit. It carries on its shoulders over ninety per cent of our

business operations, and its study is of absorbing interest entirely outside of the protective feature of the separate individual risk. Studied by mass, in groups of industries, and by the periods of the business cycle, credit is the controlling factor or the sensitive barometer of prosperities or depressions.—[The Bankers Credit Manual, by Alexander Wall, pp. 5-8, Copyright 1919-1924. Used by special permission of the publishers, Bobbs-Merrill Company.]

(a) What is a barter economy? money economy? credit economy? (b) How do Willis and Edwards and Holdsworth define credit? Compare with Wall. (c) Do you agree with Wall that "The most sensitive part of the medium of exchange is that part which is based on credit"? Explain. (d) Account for the increase in the use of credit as compared with the use of money.

97. Use of Credit versus Money

It now becomes plainer why it must be insisted that *the proper way is not to explain credit by money, but money by credit.* The real thing to be understood, in and of itself, is the exclusively mental process by which exchange may be and is carried on, and the significance of money must be derived from its incidental association with the more highly evolved way of exchanging without it. Money is the alternative, it is, on special occasions, the substitute, for credit; credit is not the substitute for money; and, therefore, its use can be explained only in connection with the usual and normal thing for which it is substituted. Finance is a specific activity within sufficiently definite environment. Credit is positive, whereas money is equivocal or neutral, and more often than not forms a portion of the passive *entourage* or fixed conditions.—[W. G. L. Taylor, The Credit System, 1913, p. 39, The Macmillan Co., New York, by permission.]

(a) Do you agree that credit is a substitute for money? Explain. (b) How does this idea of money and credit compare with Johnson's? [See his book on Money and Currency.]

98. Classification of Credit

I. (a) What different classes of credit are represented in each of the following quotations? Section 13 of the Federal Reserve Act reads in part as follows:

(a) Nothing in this Act contained shall be construed to prohibit such notes, drafts, and bills of exchange, secured by staple agricultural products, or other goods, wares, or merchandise from being eligible for such discount; but such definition shall not include notes, drafts, or bills covering merely investments or issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities, except bonds and notes of the Government of the United States. Notes, drafts and bills admitted to discount under the terms of this paragraph must have a maturity at the time of discount of not more than ninety days, exclusive of days of grace: Provided, That notes, drafts and bills drawn or issued for agricultural

purposes or based on live stock and having a maturity not exceeding six months, exclusive of days of grace, may be discounted.

(b) Definition.—A draft or bill of exchange, within the meaning of this regulation, is defined as an unconditional order in writing, addressed by one person to another signed by the person giving it, requiring the person to whom it is addressed to pay in the United States, at a fixed or determinable future time, a sum certain in dollars to the order of a specified person; and a trade acceptance is defined as a draft or bill of exchange, drawn by the seller on the purchaser of goods sold, and accepted by such purchaser.

(c) Definition.—Agricultural paper, within the meaning of this regulation, is defined as a negotiable note, draft, or bill of exchange issued or drawn, or the proceeds of which have been or are to be used, for agricultural purposes, including the production of agricultural products, the marketing of agricultural products by the growers thereof, pending orderly marketing and the breeding, raising, fattening, or marketing of live stock, and which has a maturity at the time of discount of not more than nine months, exclusive of days of grace.

(b) Why were the following clauses included in section 13: (1) "but such definition shall not include notes, drafts or bills covering merely investments or issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities." (2) "Notes, drafts, and bills admitted to discount under the terms of this paragraph must have a maturity at the time of discount of not more than ninety days." (3) "Provided, that notes, drafts and bills drawn or issued for agricultural purposes or based on live stock and having a maturity not exceeding six months may be discounted."

II. According to the methods used in classifying credit, what kind of credit does each of the following represent? (a) The promissory note of a cotton merchant. (b) A trade acceptance of a wholesale groceryman. (c) Liberty bonds. (d) Bankers' acceptances. (e) A 5-year gold note of Swift and Company. (f) United States Panama Canal bonds. (g) A 20-year bond issued by New York City. (h) United States Certificates of indebtedness. (i) Notes covering a piano bought on the installment plan by a farmer. (j) Bank deposits.

III. (a) Is credit necessarily based upon money? (b) Is credit money or money credit? (c) How does the total quantity of each compare in the United States? (d) What proposals were recently made by Thomas Edison with respect to a basis for money and credit?

99. Relation of Commercial Banks to Real Estate Operations

A very substantial part of the expansion has gone into real estate loans, as shown by the following figures:

LOANS SECURED BY REAL ESTATE MORTGAGES, DEEDS OF TRUST, OR OTHER REAL ESTATE LIENS

(As of June 30 for years indicated)

Year	National Banks	All Member Banks Federal Reserve System
1915	$150,595,000	.....
1916	160,633,000	.....
1917	185,424,000	.....
1918	185,117,000	$ 460,586,000
1919	183,982,000	577,070,000
1920	229,829,000	953,121,000
1921	280,237,000	1,135,176,000
1922	371,291,000	1,432,150,000
1923	462,737,000	1,748,661,000
1924	535,137,000	1,989,928,000
1925	636,798,000	2,338,322,000
1926	.....	2,600,000,000 (estimated)

Sources: For National Banks: *Report of the Comptroller of the Currency*, 1925, p. 457. For Federal Reserve member banks: For years 1918–24, *Statistical Abstract of the United States*, 1924, p. 239. For the year 1925, *Annual Report of the Federal Reserve Board*, 1925, p. 143.

It is reasonable to suppose that these figures would be very substantially increased if all the banks of the country were included. The banks not members of the Federal Reserve System are chiefly country banks.

It may be observed also that the growth of bank holdings of real estate mortgages during this period has not sprung from any scarcity of mortgage money available from other sources. During approximately this same period the Federal Farm Loan Banks and the Joint Stock Land Banks have issued about $1,600,000,000 of farm land bonds. City real estate likewise has suffered from no scarcity of mortgage money. During this same period there has been an immense expansion in corporate issues of securities against real estate, primarily city real estate, in addition to the Federal Farm Loan Bank and the Joint Stock Land Bank issues just mentioned. The following figures give the annual volume for 1921, 1922, and 1925.—[Chase Economic Bulletin, November 8, 1926, courtesy of B. M. Anderson, Chase National Bank, New York.]

CORPORATE REAL ESTATE ISSUES

(000,000 omitted)

	1921	1922	1925
Long-term bonds	44	152	659
Short-term bonds and notes	6	4	27
Stocks	3	7	30
Total	53	163	716
Add Refunding	1	17	37
Grand total	54	180	753

[*The Commercial & Financial Chronicle*, January 23, 1926, p. 410, by permission.]

(a) What changes in the national bank law facilitated loans on real estate since the establishment of the federal reserve? (b) May a national bank buy corporate real estate bonds? (c) What was the record of building activity from 1915 to 1926? Was the expansion of bank credit after 1919 a cause or an effect of the expansion of building activity? (d) Was the expansion of real estate loans of the member banks healthy banking? (e) Does the absolute and relative increase of time deposits over demand deposits warrant a larger investment in real estate loans and securities? (f) What change of law was made by the McFadden Act of 1927 on real estate loans?

100. Limitation on Installment Credit

"Take chewing gum, for instance," continued the Chief Merchant, warming up to his subject. "Why should anyone be obliged to pay cash in advance for a package of chewing gum? The gum may last a week. 'A Penny Down and a Penny a Day.' That's the idea. 'Chew While You Pay.'"

"In fact," said he, "everyone could enlarge his business in this way—ministers, for example. As it is now, many an ambitious young man has to postpone getting married, merely because the clergy are so far behind the times. Why should a man pay fees in advance, when the marriage may last a lifetime? It is outrageous. Let us form an Amalgamated Marriage Financing Corporation. 'A Dollar Down and a Dollar When You Think of It'; 'Enjoy Marriage Now, Pay Later'; 'Start a Home on the Principles of High Finance.' There you are: the unemployment problem among ministers solved for all time. Seductive slogans will save the State."

Still Old King Cole was not convinced. For generations his people had been taught to pay as they went and save money. Now it was proposed to urge them to spend more money than they had. How far would that take them?

"It sounds to me like another 'something for nothing' scheme," objected the King. "Suppose you did mortgage the incomes of our people for a year in advance in order to increase sales this year. How would you increase sales next year?"

"By the same method, extended and improved," replied the Chief Merchant. "We could mortgage incomes two years in advance."

"And then?"

"Then three years, of course. The future is limitless. By the time a father had spent the income of his own life in advance, he could mortgage the future income of his children. By that time we should have a new name for buying on installments, which would make people think that debts were the handmaids of prudence and thrift."

For a long time the perplexed sovereign thought, and thought, and thought; and this is what he thought:—

"Clearly enough, the Island of Plenty is able to create good things much faster than it is using them. There is the wealth, in fact, already created. That is where my troubles begin. Neither is there any doubt that my people want more of this wealth than they are able to acquire. Indeed, if they do not get more, there may be an uprising. Somehow I must keep on

encouraging habits of thrift and yet enable my people to buy all the good things they want, and are perfectly able and willing to produce; but first I must find a way of selling them the goods which they actually have produced. It is plainly a problem of distribution. I should have consulted my Chief Merchant before."

The Chief Merchant agrees. "It is well," he said, "that at last you have summoned the right man. I hardly need assure you that your problem is trifling, indeed, for a merchant. All we need to do is to sell everything on the installment plan.

"Not by that name, of course," he hastened to add, seeing the King's displeasure. "Let us call it 'The Consumers' Budget Plan.' That sounds well. Let us teach the people to buy what they want out of income, not out of capital. 'Dignified Credit for All'; 'Government Finance Applied to the Home'; 'Keep Up with Your Neighbors.' A few judicious slogans will put the plan over."

(a) Can the payments for merchandise bought on the installment basis exceed the current income of the people? (b) Is the current income increased by the fact that goods are sold on installments? (c) Must default occur in times of depression?

101. Expansion of Bank Credit

On September 15th the Columbia National Bank of New York City received a shipment $2,000,000 in gold from London. The gold was transferred to the Federal Reserve Bank of New York. If this $2,000,000 be taken as a basis, what would the maximum amount of credit which could be extended against it (assuming that all advances are made in the form of demand deposits) be in each of the following?

(a) The amount which the Columbia National could extend to its customers in the form of loans (if no rediscounts are made). (b) The amount that the Federal Reserve Bank could extend in the form of federal reserve notes. (c) The amount that the Federal Reserve Bank could extend in the form of loans or rediscounts to its members. (d) The largest combined amount between the Columbia National Bank and the Federal Reserve Bank of New York. (e) If these two banks were located in Richmond, Virginia, what would be the maximum in each case? (f) How do you account for the differences?

102. Limitation on Bank Credit Expansion

When the bank expansion grows out of increasing commercial loans this is very apt to mean an increased call for money in circulation which tends to wipe out surplus reserves, but when the expansion is connected primarily with stock market investments, stock market loans and real estate transactions, the expansion does not usually involve much cash going out of the banks into general circulation, and the process can go very far.—[Chase Economic Bulletin, November 8, 1926, courtesy of B. M. Anderson, Chase National Bank, New York.]

(a) Develop this argument. (b) Does the use of commercial bank credit for stock exchange and real estate operations cause an increase in the price level of commodities?

103. Index of Need for Bank Credit

(1919 = 100)

Year	1 Combined Index of Production & Transportation (Physical Units)*	2 Index of Wholesale Prices	3 Index of Need for Bank Credit (Production-Transportation Index multiplied by Prices)
1919	100.	100.	100.
1920	104.6	109.6	114.6
1921	89.4	71.2	63.7
1922	100.9	72.1	72.7
1923	117.2	74.5	87.3
1924	113.3	72.5	82.1
1925	119.0	76.9	91.5
1926†	124.6	73.9	92.1

* This index is an arithmetic mean of a production index and of a transportation index. The index of production is a weighted average of indices of agriculture, mining, and manufacturing. The indices are based on Federal Reserve Board figures in the *Federal Reserve Bulletin*. The index of transportation which enters into this combined index is itself an average of the indices for tonnage of revenue freight on Class I railways, ton-miles of revenue and non-revenue freight, and car loadings on revenue freight, the sources of information being publications of the Interstate Commerce Commission and of the Bureau of Railway Economics.

† The index of production and transportation for 1926 is estimated on the basis of the percentage increases shown for the first seven months of 1926 over the same period of 1925.

[Chase Economic Bulletin, November 8, 1926, courtesy of B. M. Anderson, Chase National Bank, New York.]

(a) Examine the method of calculation of the index. (b) What relation of bank credit to price level does this method assume? (c) Should any consideration of retail prices and trade be taken?

104. Bills of Exchange and Drafts

I. The following credit instruments have been given as examples of a bill of exchange and a draft. Which of these is the bill of exchange? draft?

(1) $180.00 New York, N. Y., Jan. 13, 19—
Four months after date Pay to the
Order of Richard Roe
One hundred eighty ..... Dollars
Value received and charge the same to account of
To John Jones,
Brooklyn, N. Y. John Doe
No.

(2) $180.00 New York, N. Y., Jan. 13, 19—
At sight Pay to the
Order of Brooklyn State National Bank
One hundred eighty ..... Dollars
Value received and charge the same to account of
To John Jones,
Brooklyn, N. Y. John Doe

(a) What is the fundamental difference between these two instruments? (b) Does the Negotiable Instruments Law make any distinction between bills of exchange and drafts? (c) Are both these instruments negotiable?

II. A bill of exchange is defined by the Negotiable Instruments Law as follows:

> A bill of exchange is an unconditional order in writing addressed by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay on demand or at a fixed or determinable future time a sum certain in money to order or to bearer.

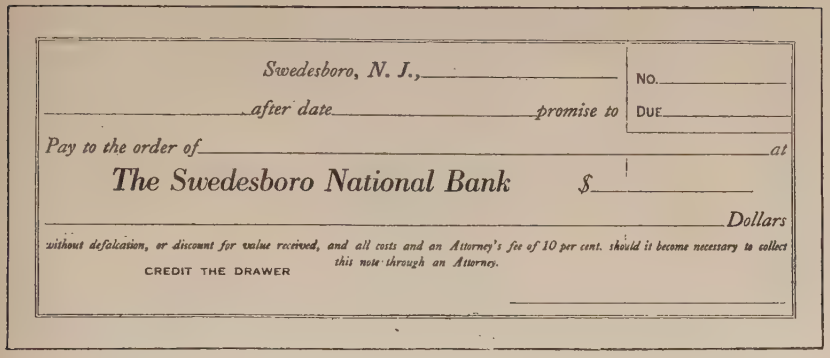
(1) Are the following instruments bills of exchange: (a) A check. (b) Bankers' and trade acceptances. (c) Bill of lading. (d) Warehouse receipt. (e) Trust receipt. (f) An order by a contractor directing the owner of a building to pay another a certain sum of money and deduct it from any amount due on final payment. (g) "Spiketon, Washington, 1911. Coast Coal Company: You are hereby authorized to deduct one dollar per month from my monthly pay to pay for the services of Dr. Skeets as my doctor"?

(2) Are the following negotiable? (a) "P. & P.: Pay to order of X $4,000. The same to be deducted from money due me on loan on 5 houses on A Street owned by L. S. The amounts are to be paid as follows: $900 when buildings are rough enclosed, $1,800 when house mortared, $1,800 when complete. Accepted P. & P.—L. S." (b) An order to pay money to the plaintiff not payable to "order or bearer." (c) (g) in question 1 above.

105. Commercial Credit Instruments

The commercial credit instruments now commonly used are presented here in order to illustrate the differences between them.

1. Promissory note:


Swedesboro, N. J., _____ No. _____

_____ after date _____ promise to Due _____

Pay to the order of _____ at

The Swedesboro National Bank $ _____

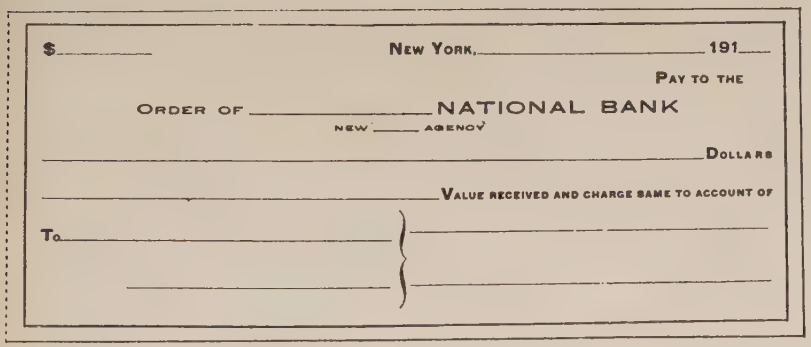
_____ Dollars

without defalcation, or discount for value received, and all costs and an Attorney's fee of 10 per cent. should it become necessary to collect this note through an Attorney.

CREDIT THE DRAWER

_____

2. The check:


$ _____ New York, _____ 191__

Pay to the

Order of _____ National Bank

New ____ Agency

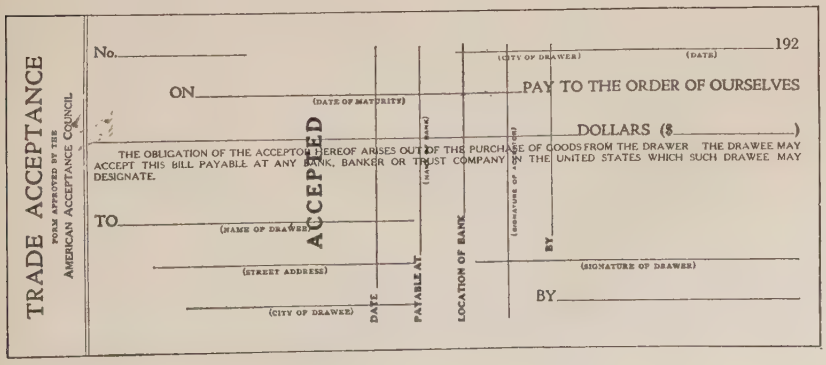
_____ Dollars

_____ Value received and charge same to account of

To _____

_____

3. The trade acceptance:


TRADE ACCEPTANCE

Form approved by the American Acceptance Council

No. _____ (City of Drawer) _____ (Date) 192

On _____ (Date of Maturity) Pay to the order of ourselves

_____ Dollars ($ _____)

The obligation of the acceptor hereof arises out of the purchase of goods from the drawer. The drawee may accept this bill payable at any bank, banker or trust company in the United States which such drawee may designate.

To _____ (Name of Drawee)

(Street Address)

(City of Drawer)

Accepted

Date

Payable at (Name of Bank)

Location of Bank

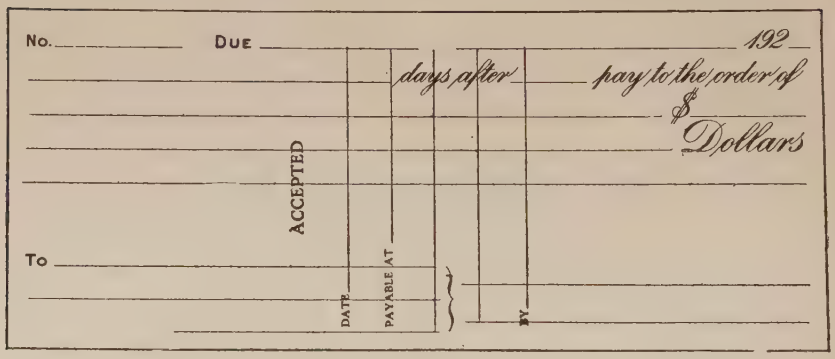
(Signature of Acceptor)

By

(Signature of Drawer)

By _____

4. The banker's acceptance:

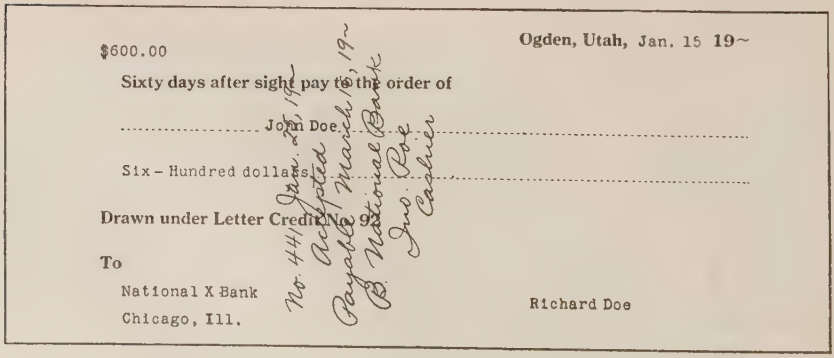


(a) What are the features of each that render it negotiable? (b) Compare these different credit instruments and list the differences. (c) What is a bill of exchange? Which of the four, if any, are bills of exchange? (d) What is the primary difference between a check and banker's acceptance? a banker's and trade acceptance? (e) Does the clause "Without defalcation . . . through an attorney" defeat the negotiability of the note? What provision, if any, does the Uniform Negotiable Instruments Act make for collection of attorney's fees?

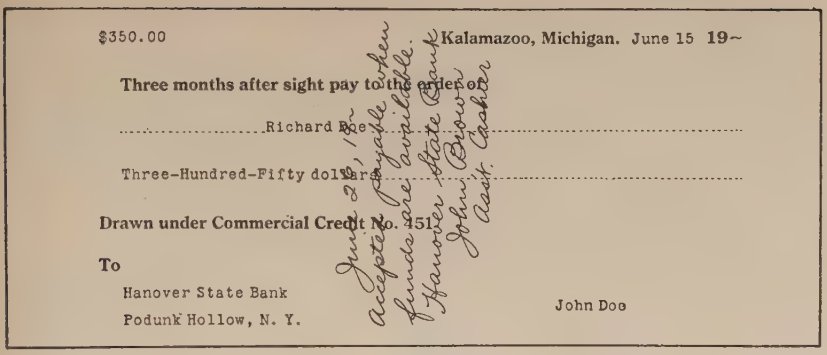
106. Nature of Bankers' Acceptances

Study each of the following financial instruments. Criticize each from the standpoint of legal form and state whether they fall within the definition of an acceptance.

(a)



(b)



$350.00 Kalamazoo, Michigan. June 15 19~

Three months after sight pay to the order of

Richard Roe

Three-Hundred-Fifty dollars

Drawn under Commercial Credit No. 451

To

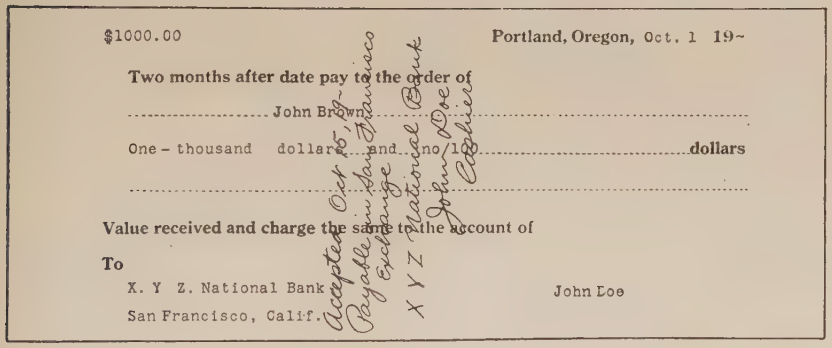
Hanover State Bank

Podunk Hollow, N. Y.

John Doe

June 20, 19~
Accepted payable when
funds are available.
Hanover State Bank
John Brown
Cash. Cashier

(c)



$1000.00 Portland, Oregon, Oct. 1 19~

Two months after date pay to the order of

John Brown

One - thousand dollars and no/100 dollars

Value received and charge the same to the account of

To

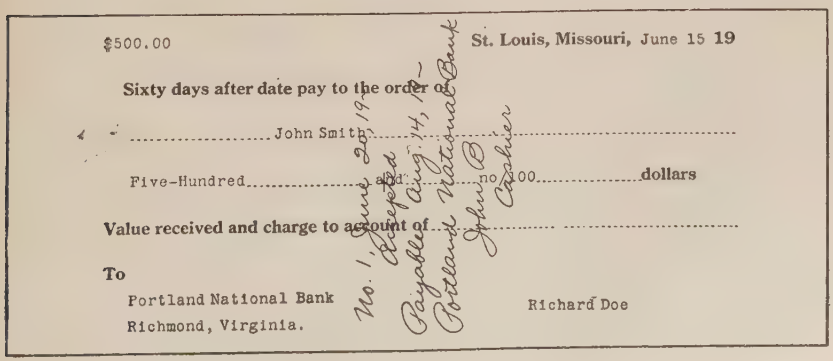
X. Y Z. National Bank

San Francisco, Calif.

John Doe

Accepted Oct 5, 19~
Payable in San Francisco
Exchange
X Y Z National Bank
John Doe
Cashier

(d)



$500.00 St. Louis, Missouri, June 15 19

Sixty days after date pay to the order of

John Smith

Five-Hundred and no/100 dollars

Value received and charge to account of

To

Portland National Bank

Richmond, Virginia.

Richard Doe

No. 1, June 20, 19~
Accepted
Payable Aug. 14, 19~
Portland National Bank
John D
Cashier

107. Promissory Notes and Their Negotiability

Promissory notes are defined by the Negotiable Instruments Law as follows:

> A negotiable promissory note within the meaning of this Act is an unconditional promise in writing made by one person to another signed by the maker engaging to pay on demand, or at a fixed or determinable future time, a sum certain in money to order or bearer. Where a note is drawn to the maker's own order, it is not complete until indorsed by him.

The law provides further that in order to be negotiable it must conform to the following requirements: (1) it must be in writing and signed by the maker or drawer; (2) must contain an unconditional promise or order to pay a sum certain in money; (3) must be payable on demand, or at a fixed or determinable future time; (4) must be payable to order or to bearer; and (5) where the instrument is addressed to a drawee, he must be named or otherwise indicated therein with reasonable certainty.

I. Study the following examples and state whether each is negotiable or non-negotiable. Give your reasons:

(a)

No. 1500 Certificate of Deposit
THE NATIONAL BANK OF NEW YORK

New York, May 5, 19—

Richard Roe .....has deposited in this Bank
Seven thousand five hundred fifty-one.....40/100 Dollars
payable to the order of..... John Jones
on return of this Certificate.

$7,551.40 John Doe

(b)

$500.00 January 2, 19—

I promise to pay to..... John Smith .....
Five Hundred.....00/100 Dollars
For value received. Interest 6%
Payable at Irving National Bank, Charleston, W. Va.

John Doe

(c) Would promissory notes containing the following provisions be negotiable? Why? (1) A note, dated May 1, and payable on or before November 1, containing the phrase "interest at 8 per cent from November 1 until paid. Interest from date if not paid when due." (2) A note containing the following provisions—"with interest at the rate of 9% per annum payable annually from date until paid; pro-

vided, however, if note is paid on or before maturity interest shall be only 7%." (3) A note containing "with interest" but did not state rate of interest. (4) A note provided for attorney's fees "if not paid promptly." (5) "Value received subject to terms of contract between maker and payee of January 25, 1926." (6) Note with the addition of "this note is given to take up the freight and rehandling of N.P. Car 43607, and proceeds of resale of said car shall apply on this note."

(d) A note given to an insurance company and providing that in case of the death of the insured before maturity the amount with interest shall be deducted from the amount of the policy. (e) "I shall pay to the order of the American Hoist and Derrick Company, on, etc., . . . $2,340.00, for amount of the second installment agreed on of a crane of their manufacture, purchased on this date, according to specifications of their representative. . . ." (f) "The maker promised to pay G., or order, a certain sum twelve months after the maker should become the owner of lands already conveyed to him by his father, reserving a life estate therein to the father." (g) "Pay to order of the First National Bank of ——, Kansas, $1,500 on account of contract between you and the S. P. M. Co." (h) Pay C., or order, three hundred dollars or what may be due on my deposit Book A, page 640."

II. Is the following a promissory note. Why?

After a good and satisfactory examination of the house and lot, described, etc., we the undersigned subscribers, hereby purchase said house and lot of B. B. Green & Co., etc.

$5,000.00 Charleston, S. C., January 2, 19—

For value received, I promise to pay to the order of B. B. Green & Co. the sum of Five thousand dollars in payments as follows:

$2,000.00 on February 1, 19—
$2,000.00 on May 1, 19—
$1,000.00 on June 1, 19—

John Doe
Richard Roe

108. Liabilities under Credit Instruments

Discuss the legal liabilities of the various parties concerned in the following events: (a) A check payable to X and indorsed in blank by X was lost, and is found by Y, who indorses it and presents it for payment at drawee bank. (b) A note signed "X, by Y, agent." (c) A check on bank X deposited on May 1 by holder Y in bank Z for collection and credit to Y's account, was presented six weeks later to X for payment but X was then insolvent. (d) A check payable to bearer is lost by X and found by Y, who indorses it "Pay to the order of Z, Y"; Z indorses it in blank when he tenders it to W.

109. Rights of Parties Involved in Loans and Drafts with Bills of Lading Attached

(a) When the seller of goods drew drafts on the buyer for the price payable to a bank, to which it delivered the drafts with bills of lading attached, and the seller allowed the buyer to obtain possession of the goods without paying the drafts, the right of the bank to the price of the goods as against a creditor of the seller, who garnished the buyer, depends on the question whether the bank was a purchaser of the goods or merely took the drafts as security for the credit made to the drawer's account. What were the rights of the bank?

(b) The drawer of drafts with bills of lading attached discounted them with the plaintiff bank, where his account was already overdrawn, receiving credit therefor and afterwards checking out his entire balance. A form of deposit slip used at times by the bank contained the statement that the bank acted as agent on out-of-town items and indicated an intention to charge back the amount if the drafts were dishonored, but no such slip was used in this instance. What were the rights of the plaintiff?

(c) A shipper of goods drew drafts on the consignee and indorsed them with the bill of lading to a bank, which advanced the amount but expected to charge interest to the shipper during the period of collection and looked to him for reimbursement upon dishonor. Who held property right to the goods?

(d) "When a draft secured by a bill of lading was transferred by the shipper to the plaintiff bank, a holder in due course, which remitted it to the defendant bank for collection, and the defendant was garnished by a creditor of the shippers. . . ." What party was liable in this case?

(e) A bank purchased a draft with a bill of lading. The bank sent the draft with the bill of lading to the drawee, who paid the draft and received the bill of lading and the property covered by it. Was the bank a holder? Why?

(f) The shipper of goods drew drafts on the buyer and transferred them with bills of lading to the bank. After a dispute arose as to the goods and payment was delayed, the shipper at the bank's suggestion saw the buyer, who gave a note payable to the shipper's order, which was transferred to the bank for value. In an action by the bank against the consignee on the note, the defendant set up negotiation in breach of a written agreement with the shipper-payee. What was the relation of shipper, buyer and bank, respectively, in this transaction?

[Source: Largely from Brannan's Negotiable Instruments Law

Annotated, The W. H. Anderson Company, Cincinnati, 1926, by permission.]

110. Rights of Parties in Accepting Drafts with Bills of Lading Attached

(a) After the plaintiff bank had taken as collateral from the payee a draft secured by a non-negotiable bill of lading, the drawee conditionally agreed in a letter to accept the draft. In reliance upon the letter the bank directed that the bill of lading be given to the consignee. Was drawee or payee liable?

(b) Defendant wrote to a bank that it would be satisfactory for the bank to honor drafts made against defendant by S covering shipments of poultry, if with shipping papers attached, until further advice. Plaintiff, after seeing the correspondence, accepted an order from S for poultry to be shipped to defendant. A draft drawn by S upon defendant, payable to plaintiff, was purchased by the bank, with shipping documents attached, but was dishonored by defendant, who paid S directly. The bank obliged plaintiff to take up the draft. Was the plaintiff or defendant liable? Why?

(c) When the drawee of a draft accompanied by a bill of lading accepted the draft and received the bill of lading, which was delivered to the defendant, who had issued the letter of credit authorizing the draft, and the plaintiff paid one who subsequently became a holder in due course of the accepted draft, can the plaintiff recover the amount paid from the defendant, who held the bill of lading for six weeks after acceptance without discovering that it was forged, whereas the drawee had only 24 hours after presentation for acceptance within which to act upon the draft. Can plaintiff recover from defendant? Give reason for answer.

[Source: Largely from Brannan's Negotiable Instruments Law Annotated, The W. H. Anderson Company, Cincinnati, 1926, by permission.]

111. Liabilities of Parties in Relation to Bills of Lading

(a) The acceptor of a draft accompanied by a bill of lading who paid a holder in due course subsequent to the acceptance can recover the amount thereof from the defendant, who had issued a letter of credit authorizing the drawer to draw upon the plaintiff for merchandise corresponding to the bill of lading, because this proved to be forged. The defendant retained these documents for several weeks without objection, although section 136 [of the Negotiable Instruments Law] allows the drawee only 24 hours within which to act upon a draft presented for acceptance. Who was liable?

(b) In Guaranty Trust Co. *v.* Grotrian, 114 Fed. Rep. 435, 52 C. C. A. 235, a bill of exchange payable sixty days after sight and containing the words, "and charge the same to account of 8417.50 bushels of flax seed," was accepted as follows: "Accepted, payable at Lloyd's Bank, Ltd. London, against indorsed bills of lading for 8417 bushels of flax seed, per Buffalo, S. S. at New York, etc." Could the acceptor recover? Why?

(c) In Hannay *v.* Guaranty Trust Co. of New York, 187 Fed. Rep. 686, the plaintiff accepted generally a draft containing the provision "charge the same to the account of R. S. M. I. 100 bales of cotton" with what purported to be a bill of lading for the cotton attached. The draft and bill of lading were indorsed to the defendant bank and upon maturity of the draft it was paid by the plaintiff's bank. Upon discovery that the bill of lading was a forgery and that no cotton was shipped, the plaintiff sued the defendant for the recovery of the money. Who would be forced to take the loss?

(d) Subsequently the Guaranty Trust Company brought an action in England against Hannay claiming declarations that the bill was an unconditional bill of exchange by the Bills of Exchange Act, that its acceptance was unconditional and that they did not, by presenting the bill for acceptance with the bill of lading attached warrant the genuineness of the bill of lading by the law of England, and that they were not bound to repay the amount of the bill. Hannay counterclaimed for a declaration that the plaintiffs were liable to repay the money to the defendant. Was acceptance conditional or must acceptor suffer the loss?

(e) A shipper of cotton drew a draft upon the buyer reading, "charge the same to account of against 214 B. C.," attached forged bills of lading, and discounted the draft with the A bank which collected it from the buyer, who received the cotton from the carrier on surrender of the forged bills of lading. The shipper used the genuine bills of lading as collateral for other drafts discounted at the B bank, which recovered from the railroad for conversion of the cotton. Can the railroad recover? Can the buyer recover?

(f) A draft issued in Kansas, with bill of lading attached, was indorsed by the defendant bank in Oklahoma, "Pay any bank or banker, all previous indorsements guaranteed." The plaintiff drawee paid the draft to a subsequent collecting bank in Texas and received the bill of lading, which was discovered to be forged. Was the defendant liable?

(g) A payee bank which cashed a draft with bill of lading attached, or placed the amount to the credit of the consignor-drawer, and collected it from the plaintiff consignee-drawee, was not liable to the plain-

tiff for defects in the merchandise covered by the bill of lading. Is this a correct statement?

[Source: Largely from Brannan's Negotiable Instruments Law Annotated, The W. H. Anderson Company, Cincinnati, 1926, by permission.]

CHAPTER IV

FUNCTIONS AND OPERATIONS OF BANKS

112. Classification of Banking Institutions

In what type of banking institution is each of the following operations performed? (a) Collection of coupons from customers' bonds kept for a fee or in consideration of a current balance of account. (b) Receipt of deposit of cash for investment in bonds soon to be issued. (c) Purchase of bonds of a public utility for sale to customers through traveling or resident agents. (d) Investment of savings in real estate mortgages. (e) Sale of securities based upon commercial accounts receivable pledged. (f) Discount of note of cooperative marketing association to run 9 months. (g) Collection of a sterling draft on London secured by a due bond attached. (h) Accepting for a commission domestic bills drawn on it covering shipment of flour. (j) Issuing dollar letter of credit to traveler going to Panama. (k) Lending on improved farm security a sum of $23,500 for 8 years. (l) Lending to cattle feeders funds procured by sale of debentures secured by chattel mortgages on livestock.

113. Terms Used in Banking

Some of the following terms are used in English banking, others in the United States and still others in both countries. Explain briefly the meaning of each:

(a) Kiting checks
(b) Cross-firing
(c) External loans
(d) Federal funds
(e) Floating money
(f) Garbling
(g) Shinplasters
(h) Inchoate bill
(i) Moratorium
(j) Old Lady of Thread-Needle Street
(k) Per procuration
(l) Reserve fund
(m) Sighting a bill
(n) Sola bill
(o) Allonge
(p) Bank post bill
(q) Bank rate book

114. The Function of a Bank

A dealer in debts or credits is a *Banker*. The debts of the whole community can be settled by transfers in the banker's books or by the delivery

of documents, such as bank notes, representative of the banker's obligations. So long as the bankers remain solvent, their obligations supply a perfectly adequate means for the discharge of debts, because a debt can be just as well cancelled against another debt as extinguished by a payment of money. Of course it is still true that if the banker himself is sued in a Court of Law, there is no legal tender in which he can be ordered to pay. But if he is solvent, he can obtain a credit from another banker. In fact, the natural test of the solvency of a private trader would be his power of obtaining sufficient bank credits to meet his liabilities, and the test of the solvency of a banker would be the ready convertibility of his obligations into the obligations of other bankers.—[R. G. Hawtrey, Currency and Credit, sec. ed., 1923, p. 4, Longmans, Green and Co., New York, by permission.]

(a) Do you regard the banker as a "dealer" in credits? If so, how does he differ from a dealer in grain? (b) What are the three principal functions of a bank laid down by Professor Dunbar? (c) Comment on Hawtrey's "natural test of the solvency of a private trader." (d) Does the ordinary business man conceive of his bank as an agency, (1) to receive his surplus funds, keep them and pay them out later, or (2) to guarantee his individual credit by substituting its own, or (3) to exchange present goods for future goods, or (4) to provide circulating media of exchange?

115. The Functions of Banks

The following quotations are given here to show what one English writer in 1860 considered the essential functions of banks to be. Study these quotations and compare them with your own text.

Banking is trading in and with money—buying, selling, exchanging receiving, and paying money—not money's worth, not goods, but money in some shape or form—that medium which is used in all civilized societies for denoting a certain exchangeable value, and thus rendering as simple and as easy as possible the mutual exchange of all the commodities required for the use of mankind.

The business of banking was not introduced into London till the seventeenth century. It was at first conducted by the goldsmiths, who lent the money lodged in their hands for security to Government and individuals.

It thus appears that in every country where money was in use, there the trade of banking seemed to follow as a natural consequence.

Banking was the channel into which money passed almost as an article of commerce, the mode by which the money, not immediately required by one individual, found its way to be used by another: the banker thus appearing to act, and really acting, in the double capacity of borrower and lender; but in neither case was he a creator, but a mere distributor of capital, any more than the baker or the butcher performed any other functions than that of distributing the articles in which they respectively dealt, and thus contributing to the general wealth of the community by the economy of time and money by this general system.

Credit is neither more nor less than the transfer of money or other valuable produce from one set of individuals called lenders, to another set called borrowers—a transfer which is greatly facilitated by the establishment of banks.

No doubt we frequently hear of great undertakings being carried on by means of credit; but such statements are entirely false and misleading. They will, indeed, be uniformly found, when analyzed, to mean only that the undertakings are carried on by means of borrowed capital. Credit is impotent to produce anything whatever. It is, in fact, a mere name for the trust reposed by a lender in a borrower.

However general has been the use of banking as a trade amongst the ancients I do not believe that the separate trade of a banker was in existence before the beginning of the last century. It is true that the Bank of England commenced business under a royal charter from King William III in 1694, but it was then principally used, both at its commencement, and for many years subsequently, for Government purposes. It was not until the middle of the last century, or about 100 years since, that it assumed or performed any important part, as it now does, in facilitating operations of trade of all kinds in this country.—[Thomson Hankey, Banking: Its Utility and Economy, London, 1860, pp. 1-12.]

(a) Explain any difference between the functions expressed in these quotations and those in your own textbook. (b) Explain the difference in the importance of note issuing power to banks in 1860 and in 1927. (c) What is credit according to your own text? Does that differ from Hankey's idea of credit? Explain. (d) Would you infer from the last paragraph above that banking was carried on extensively by the ancients?

116. Effect of Operations on the Bank Statement

Arrange the following items in the form of a bank statement, showing in parallel columns the resources and liabilities; Real estate $30,000, surplus $30,000; deposits $283,000; loans $300,000; cash $80,000; undivided profits $12,000; other assets $10,000; capital stock $100,000; stocks and bonds $80,000; circulating notes $75,000. What items will be affected and how by the following operations. (Illustrate by a new statement in each case.)

(a) The bank makes a new loan of $30,000 for two months at the discount rate of 6% per annum; proceeds are taken one-sixth in specie and the balance in a deposit account. (b) New deposits of $32,000 are made over the bank's counter, $8,000 in gold, $8,000 in notes of other banks, $3,000 in notes of this bank, $4,000 in checks on other banks and $9,000 in checks drawn on this same bank. (c) The bank adds $2,000 to its surplus and distributes a dividend of 3%; stockholders take half of the dividend in cash and leave half on deposit with the bank. (d) Loans of $30,000 mature and are paid,—$5,000

in specie, $10,000 in notes of this bank, and the balance in checks drawn against deposits in this bank. (e) A "run" occurs against the bank. To strengthen its reserve, the bank sells one-half of its bonds and stocks at a sacrifice of 5%. The "run" comes to an end after $50,000 of deposits have been withdrawn in money, and $10,500 of the bank's notes presented for redemption.

117. Effect of Operations on the Bank Statement

The Broad Street National Bank of New York City was organized in June, 1927, with a capital fully paid-in in cash of $2,000,000 and surplus of $500,000. When the bank was ready to open business on July 1, 1927, its statement would have been as follows:

BROAD STREET NATIONAL BANK

Assets		Liabilities	
Cash	$2,500,000	Capital	$2,000,000
		Surplus	500,000
	$2,500,000		$2,500,000

(a) Show the effect which the following transactions would have upon this statement. Carry the work out fully and show a complete balanced statement in the end: (1) The bank spends $70,000 for furniture and fixtures. (2) It purchases the required amount of stock in the Federal Reserve Bank of New York by remitting cash. (3) For various customers it discounts $4,000,000 of their 90-day notes, and $2,000,000 of their 120-day notes, all at 6%—the borrowers in each case leaving all of the proceeds on deposit, with the exception of $20,000 taken out in the form of cashier's checks and $300,000 taken out in the form of cash. (4) The bank received over its counter $4,000,000 in deposits; consisting of $2,000,000 of checks on other banks, $600,000 in checks drawn on itself, $400,000 in national bank notes, and $1,000,000 in legal tender notes. (5) The bank purchases with cash 2,000 United States 2% registered bonds at 102, receiving from the Comptroller of the Currency in return for these bonds the maximum amount of national bank notes permitted by law. (6) The bank then accepts for various customers, who are importing goods from abroad, $200,000 of acceptances drawn by the foreign exporters, for which it receives a cash commission of 1/4 of 1%. (7) The bank establishes its required reserve with the New York Federal Reserve Bank by rediscounting $800,000 worth of its 90-day paper at 4% and by remitting the national bank notes issued it by the Comptroller of the Currency. (8) The above operations bring the bank to the end of its business year. It declares and pays in cashier's checks a quarterly dividend of 2% (i.e., at the rate of

8% per year), and carries the net balance of its undivided profits to surplus.

(b) What would be the "exact" amount of reserve which this bank would be compelled by law to have on deposit with the Federal Reserve Bank after these transactions had been completed? (c) Transaction (6) shows that the bank is engaged in making acceptances. What would be the total amount of bankers' acceptances this bank could accept? Show the amount of each class of acceptances as well as the total.

118. Effect of Operations on the Bank Statement

The following items represent the assets and liabilities of the Third National Bank of Marietta, Ohio: Loans and Discounts $250,000; Capital $100,000; Cash $70,190; Circulating Notes $75,000; Bonds $120,000; Real Estate $26,100; Stock in the Federal Reserve Bank $3,900; Undivided Profits $12,000; Surplus $30,000; Other Assets $10,000; Due from Federal Reserve Bank $19,810, and Deposits $279,250, and Redemption Fund $3,750.

(a) Arrange the items in the form of a bank statement showing in parallel columns the resources and liabilities. (b) Trace the changes in the statement as a result of the following transactions: (1) The bank extends loans of $25,000 for 90 days at 6%, the proceeds are taken in deposits. (2) New deposits of $40,000 are received over the bank's counter as follows: gold $10,000, $10,000 in notes of other banks, $2,000 in notes of this bank, $6,000 in checks drawn on this bank, and $12,000 in checks drawn on other banks. (3) Checks drawn on this bank are presented and cashed amounting to $5,000. (4) Notes amounting to $30,000 mature and are paid, $10,000 cash and $20,000 in checks drawn on this bank. (5) A run occurs against the bank. To tide it over the difficulty and increase its reserve, the bank sells one-third of its bonds at a sacrifice of 1%. The run finally ends after $45,000 of deposits have been withdrawn and $15,000 of the bank's notes have been presented for redemption. (6) Show a balanced statement in the end.

119. Bank Statements

In a typical national bank statement what relation, if any, should obtain between the following items? (a) Loans (plus discounts) and deposits. (b) Capital (plus surplus) and cash reserve. (c) Capital (plus surplus) and loans (plus discounts). (d) Deposits and cash. (e) Deposits and "due from banks." (f) Securities and national bank notes. (g) Loans (plus discounts) and total assets. (h) Surplus and capital. (i) Undivided profits and capital.

120. Capitalization of National Banks

(a) How has the establishment of minimum capitalization of national banks affected their geographical distribution? their number? (b) Do banks in suburbs of big cities enlarge their capitalization when the suburbs are annexed? (c) What is the theory of minimum capitalization—is it to prevent an excessive number of small banks or to provide a big buffer for depositors? (d) How would the introduction of a branch bank scheme affect this requirement?

121. Banking Power of All Banks in the United States

The Comptroller of the Currency in his Annual Report for 1925, pp. 110-11, published the following statement and table:

The combined banking power of all banks in the United States, including 8,072 national banks, 20,769 banks other than national, the 12 Federal reserve banks, and estimated figures for 437 non-reporting private banks, was $60,469,400,000 and exceeded the amount June 30, 1924 by $4,022,900,000.

BANKING POWER OF THE UNITED STATES, JUNE 30, 1925

(000,000 omitted)

	Number of Banks	Capital Paid In	Surplus and Profits	Deposits[1]	Natl. Bank Circulation, Fed. Res. Notes & Fed. Res. Bk. Notes	Total June, 1925	Total June, 1924	Increase over 1924
		$	$	$	$	$	$	$
National banks	8,072	1,369.4	1,600.6	17,023.3	648.5	20,641.8	19,172.7	1,469.1
Reporting state banks, savings banks, trust companies and private banks	20,769	1,800.3	2,580.1	30,588.8	.....	34,969.2	32,381.5	2,587.7
Non-reporting private banks (estimated)	437	9.0	8.7	105.6	.....	123.3	116.9	6.4
Total	29,278	3,178.7	4,189.4	47,717.7	648.5	55,734.3	51,671.1	4,063.2
Federal reserve banks	12[2]	115.6	217.8	2,767.5	1634.2	4,735.1	4,775.4	40.3[3]
Grand Total	29,290	3,294.3	4,407.2	50,485.2	2282.7	60,469.4	56,446.5	4,022.9

[1] Includes dividends unpaid, postal savings and United States deposits, certified checks and cashiers' checks outstanding, but not amounts due to other banks, except deposits of Federal reserve banks, which are reported gross.

[2] June 24, 1925.

[3] Decrease.

NOTE: Information for non-reporting private banks has been estimated by using as a basis for the calculation statements of reporting private banks. Only such institutions as are performing the functions of a bank are included in the total number of private banks. Concerns whose business is confined to the selling of investments are not included in the list of private bankers.

(a) Secure similar individual figures for trust companies, mutual savings banks, stock savings banks, commercial state banks. From these figures, determine the relative percentage importance of each

class of banks. (b) Why are the deposits of all banks and the circulation of national banks given in this table as a test of banking power but total resources not given? (c) What is the ratio between the proprietary interest and deposits? proprietary interest and loans and discounts? (d) Ascertain the total loans and discounts for state (commercial) banks and trust companies and national banks. With these data, determine which type of banking institution does the largest volume of business on a given capitalization. (e) What per cent is supplied by the banks which are members of the federal reserve system?

122. Labor Banks

In the summer of 1926 a New York house published the following statistics from a survey conducted by it of the labor banks of the United States:

That there are 38 labor banks with a total capitalization of $10,435,180.

That deposits in labor banks on June 30, 1926, amounted to $108,531,664, a gain of 10% since December 31, 1925.

That there are several large banking institutions with combined resources in excess of $108,000,000 in which labor organizations have substantial but not controlling interest.

That there are labor investment companies with a combined capitalization of $31,000,000.

That the Brotherhood of Locomotive Engineers have founded fifteen banks with resources well over $54,000,000 and eight investment companies with a combined capitalization of $23,500,000.

That the largest labor bank is the Brotherhood of Locomotive Engineers Cooperative National Bank of Cleveland, Ohio, with resources of nearly $27,000,000.

That the "most representative labor bank on the American continent" is the Federation Bank & Trust Co. of New York, with resources close to $18,000,000.

That banks are located in 35 cities and in 20 States under the control and auspices of a highly diversified group of trade unions. The business of these banks is varied.

(a) When was the first labor bank founded? Comment on the rate of growth of the labor bank movement. (b) Is there anything in the character of the Brotherhood of Locomotive Engineers why it should be the union to lead the labor bank movement? (c) Why is it socially and economically desirable that the labor banks should be scattered geographically? of diversified types of business? founded by many different labor unions? have high capitalization? (d) The savings of the wage earners of the country are estimated at from $6,000,000,000 to $7,000,000,000: comment on the possible influence of labor banks in the future. (e) What is the attitude of the Ameri-

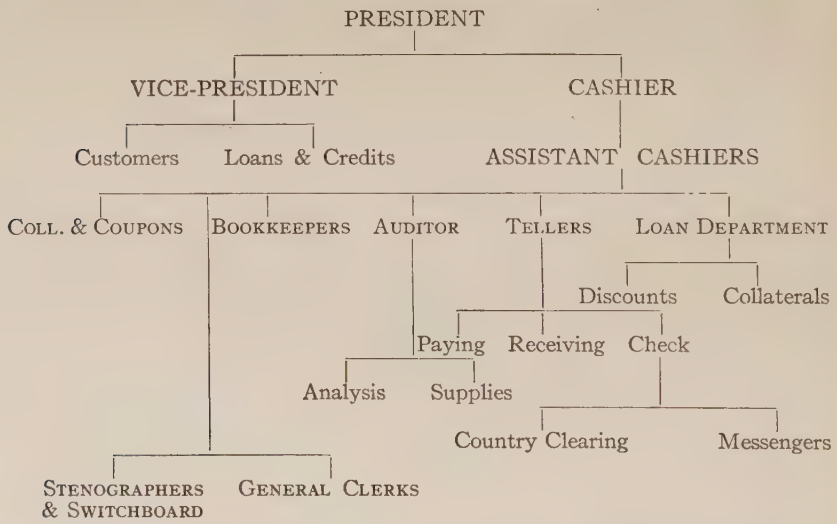
can Federation of Labor toward labor banks? (f) Is it better that the labor unions buy shares of outside investment and trust companies than found and operate companies of their own? (g) Is the stock of labor banks widely held? is it held by the unions or by the members of the unions? (h) The labor banks are regarded as cooperative banks, sharing profits with the depositors: in this respect how do they differ from the mutual savings banks? (i) Do the unions deposit their union funds in the labor banks? If so, how are their funds endangered? (j) Do labor banks favor unions and union members in extending loans, or are their loans based on cold calculations of credit title? (k) Point out ways in which labor banks may help promote labor unionism. (l) What is the attitude of the non-union bankers toward labor banks? (m) How do the labor banks man their banks at the start? (n) Give reasons why labor banks must be more conservative than non-labor banks.

CHAPTER V

ADMINISTRATION AND MANAGEMENT

123. The Focal Position of the Cashier

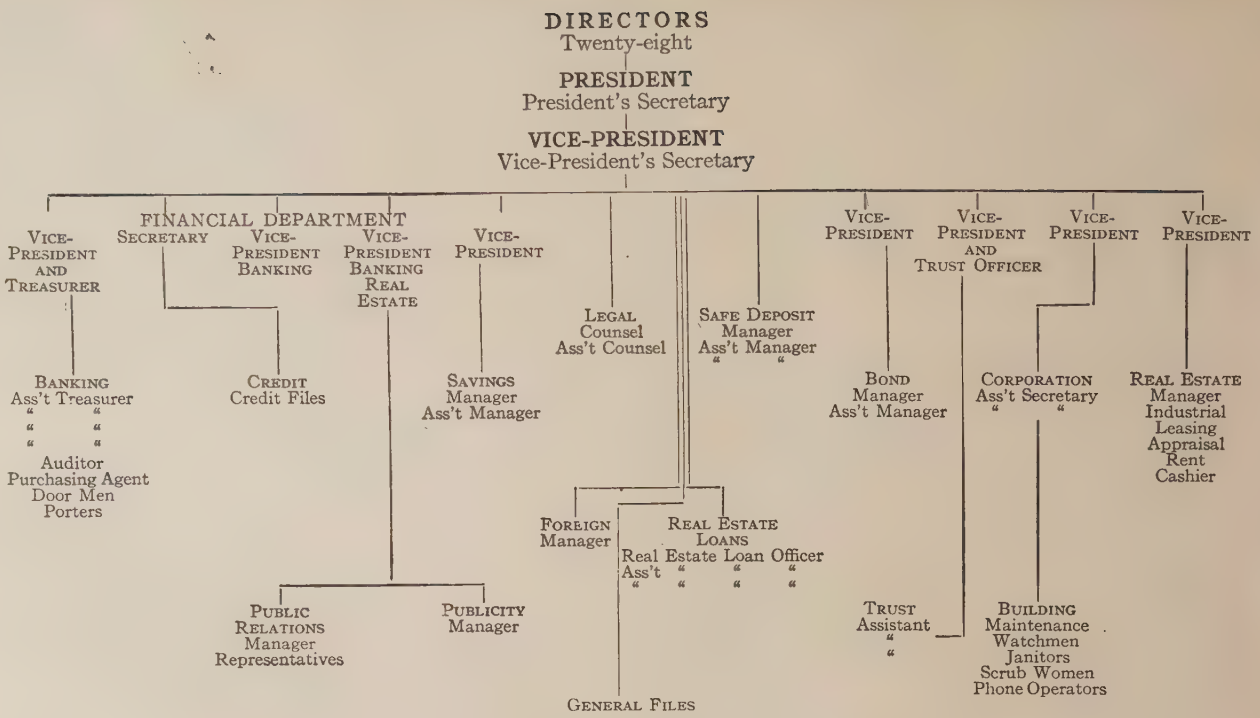
The chart of a national bank presented here shows the relationship of the various departments to each other and to the president and other bank officials. Attention is directed to the focal position of the cashier through whose office all work finally passes or is directed.



(a) How do you account for the fact that the cashier holds such a prominent position in the organization? (b) Is his power and control getting smaller or larger with the changing size of the banking unit? Explain. (c) Why should loans and credits be assigned to the supervision of the vice-president?

124. The Missouri Trust Company

The chart on the following page shows the organization of a large trust company located in the state of Missouri. This trust company does a large volume of business and holds a very prominent place in the banking community.


DIRECTORS
Twenty-eight
PRESIDENT
President's Secretary
VICE-PRESIDENT
Vice-President's Secretary
VICE-PRESIDENT AND TREASURER
Banking
Ass't Treasurer
"
"
"
"
Auditor
Purchasing Agent
Door Men
Porters
FINANCIAL DEPARTMENT
Secretary
Credit
Credit Files
VICE-PRESIDENT BANKING
VICE-PRESIDENT BANKING REAL ESTATE
Public Relations
Manager
Representatives
Publicity
Manager
VICE-PRESIDENT
Savings
Manager
Ass't Manager
Legal
Counsel
Ass't Counsel
Safe Deposit
Manager
Ass't Manager
"
Foreign
Manager
Real Estate Loans
Real Estate Loan Officer
Ass't "
" "
" "
" "
General Files
VICE-PRESIDENT
Bond
Manager
Ass't Manager
VICE-PRESIDENT AND TRUST OFFICER
Trust
Assistant
"
"
VICE-PRESIDENT
Corporation
Ass't Secretary
" "
Building
Maintenance
Watchmen
Janitors
Scrub Women
Phone Operators
VICE-PRESIDENT
Real Estate
Manager
Industrial
Leasing
Appraisal
Rent
Cashier

(a) How do you account for the large number of directors? Do state bank laws usually provide a maximum and minimum number of directors? Why? (b) Does this chart show that the trust department carries on its trust business independent of its commercial banking business? (c) What is the theory of the Federal Reserve Act which requires that the trust business shall be kept separately from commercial banking business? (d) If you were operating a national bank in the state of Missouri which had a trust department, under what law or laws would your trust business be carried on? Explain.

125. Interlocking Directorates

SEC. 8. That from and after two years from the date of the approval of this Act no person shall at the same time be a director or other officer or employee of more than one bank, banking association, or trust company organized or operating under the laws of the United States, either of which has deposits, capital, surplus, and undivided profits aggregating more than $5,000,000; and no private banker or person who is a director in any bank or trust company organized and operating under the laws of a State, having deposits, capital, surplus, and undivided profits aggregating more than $5,000,000, shall be eligible to be a director in any bank or banking association organized or operating under the laws of the United States. The eligibility of a director, officer, or employee under the foregoing provisions shall be determined by the average amount of deposits, capital, surplus, and undivided profits as shown in the official statements of such bank, banking association, or trust company filed as provided by law during the fiscal year next preceding the date set for the annual election of directors, and when a director, officer, or employee has been elected or selected in accordance with the provisions of this Act it shall be lawful for him to continue as such for one year thereafter under said election or employment.

No bank, banking association, or trust company organized or operating under the laws of the United States, in any city or incorporated town or village of more than two hundred thousand inhabitants, as shown by the last preceding decennial census of the United States, shall have as a director or other officer or employee any private banker or any director or other officer or employee of any other bank, banking association, or trust company located in the same place: *Provided,* That nothing in this section shall apply to mutual savings banks not having a capital stock represented by shares: *Provided further,* That a director or other officer or employee of such bank, banking association, or trust company may be a director or other officer or employee of not more than one other bank or trust company organized under the laws of the United States or any State where the entire capital stock of one is owned by stockholders in the other: *And provided further,* That nothing contained in this section shall forbid a director of class A of a Federal reserve bank, as defined in the Federal Reserve Act, from being an officer or director, or both an officer and director, in one member bank: *And provided further,* That nothing in this Act shall prohibit any private banker or any officer, director, or employee of any member bank or class A director of a Federal reserve bank, who shall first procure the consent of the Federal Reserve Board, which board

is hereby authorized, at its discretion, to grant, withhold, or revoke such consent, from being an officer, director, or employee of not more than two other banks, banking associations, or trust companies, whether organized under the laws of the United States or any State, if such other bank, banking association, or trust company is not in substantial competition with such banker or member bank.

The consent of the Federal Reserve Board may be procured before the person applying therefor has been elected as a class A director of a Federal reserve bank or as a director of any member bank.

. . . . . .

When any person elected or chosen as a director or officer or selected as an employee of any bank or other corporation subject to the provisions of this Act is eligible at the time of his election or selection to act for such bank or other corporation in such capacity his eligibility to act in such capacity shall not be affected and he shall not become or be deemed amenable to any of the provisions hereof by reason of any change in the affairs of such bank or other corporation from whatsoever cause, whether specifically excepted by any of the provisions hereof or not, until the expiration of one year from the date of his election or employment.—[Clayton Antitrust Act, approved October 15, 1914, as amended by the Kern amendment, approved May 15, 1916, as amended by the Act approved May 26, 1920.]

(a) What were the underlying conditions in this country in 1914 that brought about the passage of this section in the Clayton Antitrust Act? (b) Does this act apply to all members of the federal reserve system or only to national bank directors? (c) Would a strict adherence to the law by the Federal Reserve Board have any influence on the number of large national banks?

126. Liability of Directors for Losses Caused by Illegal Acts

Legislation recommended by the Comptroller of the Currency:

To authorize the Comptroller of the Currency to bring proceedings against directors for losses sustained by bank through violation of the national bank act.

That the Comptroller of the Currency be authorized to bring proceedings against directors of a national bank for losses sustained by the bank through violations of the provisions of the national bank act or the Federal Reserve act.

Section 5239, United States Revised Statutes, provides as follows:

"If the directors of any national banking association shall knowingly violate, or knowingly permit any of the officers, agents, or servants of the association to violate, any of the provisions of this title, all the rights, privileges, and franchises of the association shall be thereby forfeited. Such violations shall, however, be determined and adjudged by a proper circuit, district, or Territorial court of the United States, in a suit brought for that purpose by the Comptroller of the Currency, in his own name, before the association shall be declared dissolved. And in cases of such violation every director who participated in or assented to the same shall be held liable in his personal and individual capacity for all damages which

the association, its shareholders, or any other person shall have sustained in consequence of such violation."

Banks often have sustained large losses as a result of the wilful and persistent disregard by its directors of the clear provisions of the national bank act. These losses, resulting from violation of the law by directors, fall upon the stockholders. The directors who have occasioned these losses by involving the bank in unlawful transactions to facilitate or promote schemes or enterprises in which the directors may be concerned, are found sometimes to be holders or owners of but few shares of the stock of the bank the affairs of which they are directing and the funds of which they frequently have tied up in the promotion of their own private schemes.

Very often stockholders never are informed of the losses the bank has suffered through these irregular transactions. It is the practice of some banks to keep their transactions from shareholders, especially those transactions which have resulted in losses. Thousands of banks give stock holders, at the close of each fiscal year, little or no information of the sources of the earnings and the details of the disbursements and losses.

Even when shareholders have knowledge of the losses incurred through violations of the law by the officers or directors of the bank, should they proceed to bring suit against the unfaithful directors for the benefit of themselves and their fellow shareholders, such action might precipitate a run upon the bank and result in suspension or unnecessary loss. . . . —[Report of Comptroller of the Currency, 1918, Vol. I, p. 74.]

(a) Wherein did the legislation recommended by the Comptroller differ from the existing law? Why was it expected to be more effectual and just? (b) If losses are sustained by the bank through operations of the directors within the law, should the bank be held for the losses? Is the argument the same if the operations are contrary to the law? (c) Should the law establish against all directors of a national bank an antecedent presumption that they know and consent to whatever is done in the bank habitually, and to whatever else goes on there that an ordinary intelligent business man would discover by use of reasonable diligence?

127. Liability of Stockholders of National Banks

Assume that an individual has invested $7,500 in the stock of the New York National Bank at the time of its organization in 1915. He received fifty shares of stock—$100 per share in capital and a surplus of $50—making the total investment or amount paid by him $150 per share.

(a) With the double liability of all stockholders of national banks in mind, suppose that the bank was prosperous during the first four years, having earned large profits, and had increased the surplus to 100% of the capital, thereby making the book value equal to $200 per share in 1919. Further assume that the bank made a series of bad loans during 1919, resulting in large losses to the bank, and forc-

ing it into liquidation. In the event that the Comptroller of the Currency finds that the assets on August 1, 1920 (time of bank failure) are equal to 67% on each dollar of liabilities, what would be the individual's total liabilities? (b) If the stockholders decide to come forward and make good the impairment of capital and put the bank on a sound basis again, what total amount would he as a stockholder be asked to pay at the time of reorganization, say on December 1, 1920? (c) Suppose that after this reorganization the bank for a time makes profits, but by January 1923 has again lapsed into its old habit and incurs losses through bad loans. It is forced into liquidation, the assets equalling 40% of the total liabilities. What would be his liability, keeping in mind the various amounts which he had paid at previous times? Give reasons for your answer and cite legal authority.

128. The Efficacy of Double Liability

Out of 3,805 national banks organized since . . . 1863, only 120 . . . have been placed in the hands of the receivers. . . . The affairs of 85 banks of the 120 have been finally closed, . . . 7 are virtually closed, . . . leaving 28 receiverships only in active operation. The total amount so far paid to creditors of insolvent national banks has been $29,434,986, upon claims amounting to $46,938,388. . . . Assessments amounting to $9,945,250 have been made upon stockholders of insolvent national banks. . . . From this source the gross collections amount to $4,682,563. . . . Suits are pending in some cases.

It will be observed that the gross collections from stockholders of insolvent banks amount to only about 47% of the assessments. Unfortunately the cost of litigation attending such collections can not be accurately ascertained from the records of this office, but it has been very great, and should be deducted from gross collections. The Comptroller is disposed to think the net amount actually realized to creditors from this source has been under, rather than over, 40% of the total assessments. In any case the figures show that the security afforded to creditors by subjecting shareholders to liability beyond the loss of their stock is quite disproportionate to the damage inflicted upon solvent shareholders. This personal-liability feature tends to discourage prudent business men from investing in national-bank stock, while contested assessments generally develop an amount of chicanery and fraud which must exercise an injurious influence upon morals.—[Report of the Comptroller of the Currency, 1887, pp. 79-80.]

(a) Do conditions similar to the above obtain at the present time? (b) If certain of the assessments upon the stockholders of insolvent banks prove uncollectible, is the loss borne by the depositors, or are further assessments made against the stockholders who are able to pay and from whom collections have been successful? (c) In your opinion are investors discouraged at the present time from investment in national bank stock by the double liability feature?

129. Proposal to Relieve National Bank Shareholders of Double Liability

That section 5151 be so amended as to exempt from further liability the shareholders of national banks of which the surplus shall exceed by 20% the amount of capital stock of the bank, and that they shall be partially relieved from such responsibility in proportion as the surplus shall exceed the 20% now required by law. Provision, however, should be made that such exemption cannot be obtained through any process by which capital becomes converted into surplus, and also that such exemption is not to be enjoyed until after the Comptroller of the Currency is satisfied that the entire capital and surplus are represented by good assets.—[Report of the Comptroller of the Currency, 1886, p. VI.]

(a) A new national bank will often be started with a capitalization and surplus equal in amount: what are the purposes of such an arrangement? (b) If a national bank started with a capitalization of $100,000, but with no surplus, and accumulated a surplus of $100,000 within ten years, do the depositors as a group have double the protection they had before the surplus was accumulated? is the protection per dollar of deposits twice as great as before? (c) Is it logical to reduce the liability in proportion to the ratio of surplus to capitalization? (d) What is meant by "any process by which capital becomes converted into surplus," and why should the exemption from liability not apply in such cases? (e) Do capital and surplus constitute a segregated part of the assets so that they may be investigated by the Comptroller to learn whether they are "good assets"? (f) The protection to depositors from the provision of double liability declines as the surplus grows, as the shares are broadly held, and as the volume of national bank notes outstanding against the bank increases: give the reasons.

130. Directors on Executive Committee.

In many national banks throughout the country the board of directors meets weekly or oftener, and the business of the bank is brought before the full board. In many other cases, however, the banks are practically being run by a standing committee; and those directors who are not members of this committee have little or no knowledge as to the operations and real condition of the bank.

In its sworn report one large bank in one of the central reserve cities gives the names of 16 directors no one of whom has served on its executive or finance committee in the past five years.

The records of this office show that many bank failures could have been avoided if directors had been kept informed as to the transactions of the bank. It is obvious that where banks are practically run by executive or finance committees all members of the board should be required to serve in turn, for periods agreed on, on such committees, so that all members of the board may become members of the committees not less frequently than every two years.

It is important that in cases where the directors do not keep informed as to the operations of the bank, the members of the executive or finance committee in any event be posted.—[Report of Comptroller of the Currency, 1915, Vol. I, p. 38.]

(a) What is meant by an executive or finance committee? why is it necessary? (b) Would the type of compulsory service on the executive or finance committee, as recommended by the Comptroller, accomplish the end sought? (c) May a board of directors, or an individual director, divest themselves (or himself) of responsibility, by use of an executive committee to operate the bank? (d) What is the best composition of a finance committee?

131. Advertising for New Business

One bank soliciting business published the following statement:

Through 57 years of multiplied contacts with business and banking institutions reaching every known market, this Bank has acquired in unusual degree that caliber and breadth of vision which bank officials recognize as desirable in their Chicago correspondents.

Another advertisement read:

This bank was established ninety-five years ago, in 1831. An advertisement in the first issue of the . . . Magazine would have shown capital of $134,650, surplus of $16,543, deposits of $18,020, notes and exchange discounted $543,648.

Today capital of $500,000 is supplemented by surplus and profits of over $900,000, deposits total $4,700,000, loans and discounts $3,100,000, bonds, etc., $2,000,000, and total assets $6,200,000.

A third bank advertised as follows:

When you appoint this company as executor under your will you place in charge of your estate an organization which has been in business since 1875, which has handled hundreds of estates, and which has a personnel composed of specialists in estate and trust business—an executor of unquestioned dependability. Thus you assure successful administration for your estate.

A fourth advertisement read as follows:

90 Years of Efficient Service to Clients Throughout the World

Capital and Surplus	$4,000,000
Resources over	$44,000,000

The steady progress made by this old-established financial institution throughout the many troublous periods since it was organized in 1836 has especially prepared it to serve any bank at . . .

Correspondence invited

(a) What type of business is each of these banks appealing to

especially? (b) Which of the four do you regard as the most convincing? Why? (c) Which is more important, capital and surplus or total resources in a bank advertisement? the capital and surplus or the number of years the bank has been in successful operation? (d) Does the advertisement for trust business give any outstanding inducements which would be especially attractive to a trustor? Why?

132. Ratio of Bank Capitalization to Deposit Liability

Certain states permit state banks to organize with a capital of $25,000 without regard to population and no provision is made to require such banks to increase their capitalization commensurate with their deposit liabilities. The maximum capital required of a national bank is $200,000. According to press reports, a national bank in one of our large cities failed, during the month of July this year, with a deposit liability of aproximately $3,000,000 on a capitalization aggregating $1,016,000 of which amount capital was $1,000,000. The loss to shareholders was not stated but one official of the bank estimated that it would be between $750.000 and $900,000. Fortunately, this bank was sufficiently capitalized. Moreover, with the closing of the bank, it was announced by the Clearing House Association of that city that its members had agreed to guarantee the payment of all the deposits. Suppose that this bank had had capital only in the required amount, which is $200,000, the resultant loss to members of the Clearing House Association would have been between $350,000 and $500,000, assuming that the shareholders' assessment liability was realizable. The foregoing illustration shows very clearly the necessity for adequate bank capitalization.

During recent years, banks have been merged with growing frequency and very often something like the following has taken place. An institution that we will call Bank A with a capitalization of $500,000 and a deposit liability of $5,000,000 is liquidated (necessarily) and its deposits assumed by another institution that we will call Bank B, the capitalization and deposit liability of which are respectively $1,000,000 and $8,000,000. The deposits of the liquidating institution are purchased by Bank B, making a total deposit liability of $13,000,000 without any increase in capitalization. Plainly, Bank B does not afford security to its combined depositors in the same measure that it did to its depositors prior to the acquisition of Bank A's deposit liability.—[Wm. P. Flynn, Ratio of Bank Capitalization to Deposit Liability, Proceedings of Clearing House Examiners and Managers Conference, Held at Chicago, Ill., September 29, 1924, published by American Bankers Association, New York, 1924, pp. 49-50.]

(a) Has the ratio between deposit liability and capitalization declined in the United States during the past ten years? Verify by figures. (b) Would a ratio of 7 to 1 be satisfactory? Why? (c) Do bank mergers generally result in a larger volume of deposit liability in proportion to the capitalization?

133. Securing New Business

John Smith, the new-business man of the Tenth National Bank of New York, visited John Jones, the manager of the Lincoln Shoe

Manufacturing Company and invited him to become a depositor of the Tenth National Bank. Jones replied, "I will transfer our account to your bank and will carry a daily balance of $40,000 if you will guarantee us a line of credit of $100,000 and pay us 2¼% interest on our daily balance." At Smith's request, Jones handed him the following financial statement:

THE LINCOLN SHOE MANUFACTURING CO.

December 31, 1926

ASSETS		LIABILITIES	
Cash	$ 74,000	Bills payable	$ 75,000
Bills receivable	280,000	Accounts payable	350,000
Accounts receivable	230,000	Surplus	145,000
Merchandise	560,000	Capital stock	1,100,000
Fittings	36,000		
Real estate	490,000		
Total	$1,670,000		$1,670,000

Sales	$3,750,000
Purchases	3,200,000
Discounts taken	160,000
Discounts given	135,000
Dividends	7%

Smith submitted his report together with the Lincoln Shoe Manufacturing Company's financial statement to his bank, stating the conditions under which the account could be obtained.

(a) As credit manager of this bank, outline the steps which you would take regarding this account before actually accepting it. (b) What are the primary factors to be considered? (c) What would be your principal sources of information? (d) Does the financial statement show that this company has an efficient credit and collection system? Give reasons.

134. Rights of Shareholder to Examine Books of Bank

Shareholder has common law right to examine books of bank. (U. S. Sup. Ct., 1905.) The shareholder has a common-law right, for proper purposes and under reasonable regulations as to time and place, to inspect the books of the corporation of which he is a member. The possibility of the abuse of a legal right affords no ground for its denial, and while an examination of the books of a corporation should not be granted for speculative or improper purposes, it should not be denied when asked for legitimate purposes. Where stockholders of a national bank have the legal right to enforce inspection, the State court has authority to enforce the right by granting the proper relief in a judicial proceeding. Nothing in section 5211, Revised Statutes, requiring reports by, or in section 5240, Revised Statutes, providing for examination of, national banks cuts down the usual common-law rights of shareholders in such corporations. The term visitorial powers as used in section 5241 does not include the com-

mon-law right of the shareholder to inspect the books of the corporation. (Guthrie, President Commercial National Bank of Ogden, Utah *v.* Harkness, 199 U. S., 148.)

(La., 1899.) A shareholder or other person with a laudable object to accomplish or a real and actual interest upon which to predicate his request for information disclosed by the books of the bank, is given by the fundamental law the right to inspect them. (State *ex rel.* Burke *v.* Citizens' Bank of Jennings, 1 Banking Cases, 369; 51 La. Ann. 426.)

Right of stockholder to inspect corporate books—common law.

At common law stockholders have the right to examine and inspect the books and records of the corporation of which they are members, at all reasonable times, in order that they may thereby be informed of the condition of the corporation, its purpose, and business. The doctrine of the law is that the books and papers of an incorporated company, although of necessity kept in the hands of some proper officer or agent, are the property of all the shareholders.

(N. Y. Appls. 1902.) The supreme court has power, in its discretion, to compel the officers of a national bank in process of liquidation, on expiration of its charter by limitation, to exhibit books, papers, and assets of the bank to the stockholders, and to permit them to examine and take extracts therefrom. (Tuttle *et al. v.* Iron Nat. Bank of Plattsburg *et al.*, 62 N. E. Rep., 761; 4 Banking cases, 300: 170 N. Y., 9.)—[Digest of Decisions Relating to National Banks, 1912, with Appendix 1912-1920, issued by Comptroller of the Currency, 1921, pp. 529-32.]

(a) Why should not shareholders be allowed freely to examine the books of the bank? (b) Do the provisions of the Pepper-McFadden Act change this in any respect?

135. Bank of America Voting Trust Upheld

Following the decision of the Appellate Division of the Supreme Court, the New York *Times* published this condensed statement:

The voting trust by which the present management maintains its control of the Bank of America was upheld yesterday in a decision of the Appellate Division of the Supreme Court. The Court denied the motion of the National Liberty Insurance Company for permission to appeal to the Court of Appeals from a decision that upheld the validity of the voting trust agreement last summer.

Officers of the bank said yesterday that the way probably had been cleared for an increase in the capital stock of the bank, proposed early this year, but held up pending the outcome of the litigation. It was declared that a meeting would be called next month to authorize an increase in the capital stock from $6,500,000 to $8,000,000. It is not expected that further efforts will be made to interfere with the operation of the voting trust.

The trust was created on December 31 and is composed of Edward C. Delafield, President of the Bank of America; Frederick E. Hasler and Edward Thorne. A contest was waged for several years, in which the management charged that efforts were being made by the heads of another financial institution to take control of the Bank of America away from the interests that had managed it for many years. Early this year it was announced that deposits of stock under the trust agreement had been made

in sufficient amounts to assure control of the bank, and a special meeting of stockholders was called for Feb. 26 to authorize the increase in the capital stock. Before that date the minority stock interests obtained an injunction restraining the trust from voting the trusteed stock, and the meeting had been postponed from month to month.—[The New York *Times*, October 23, 1926, p. 25.]

(a) What are the principal features of a voting trust agreement? (b) What is usually the underlying reason for the creation of a voting trust? (c) Are the reasons indicated in this quotation for the creation of the voting trust by the stockholders of the Bank of America? If so, state them. (d) If the voting trust agreement is held to be valid by all courts, would it be necessary to get the approval of stockholders in order to increase the capital of the bank? To decrease it?

136. Departmental Banks in California

You must departmentalize. I venture to say that if it were put to a vote of the bankers of the State of California that are not branch bankers and are not departmental bankers, and they were asked which would be of the greatest benefit to them, departmentalizing or branch banking, they would say departmentalizing. This is because you can sustain your institution better, get a better clientele and more of it through the benefits of departmental banking as we carry it on in California; and I think it is not carried on as we do in California anywhere else, because we have allocation of capital and restriction of investment and all those things.—[1924, Hearings on H. R. 6855, p. 144.]

(a) What is meant by "departmental banking" in California? (b) Why does a state banker in California claim that savings deposits are protected better in his bank than they are in national banks? (c) How does the internal organization of a "departmental bank" differ from the organization of other banks? What advantages are supposed to accrue?

137. Employee Control

The first records of the experience of the Bank of Italy under its recently announced change of policy, by virtue of which the control passes to the employees, are now available. They show that during the six months that this plan has been in operation the bank has experienced a deposit increase of $10,000,000, added a million dollars to surplus, and another million to surplus account; 15,000 new accounts have been secured and the dividend rate has been raised to 15%.

Individually the employees have been benefitted to the extent of $531,459.80 distributed in stock. This has cost them, on an average, $74.25 for a share of stock having a market value of $310. Actually the employees put in out of salary $133,767 and the bank added $397,692.80.

The new plan, in general, provided that 40% of the bank's profits should be set aside at the end of each semi-annual period, and to this should be added a sum contributed by the employees from salary.

Limits were placed upon the amounts that any individual might put into the general pool, the thought being to prevent an unbalanced participation. As a result the whole staff has felt encouraged to have a part in the undertaking—and there is actually 100% of the personnel signed up for a share in the plan.

The entire structure is founded upon the expectation that eventual control of the bank will be vested in the employees, and the present basis on which profits are shared is simply a convenient means to accomplish the desired end. The dividends on the stock transferred to the employees are paid to them. It is not held back or set aside against some future contingency, but is paid over in cash. Ultimately, it is foreseen that the dividends may actually pay the employees' contribution to the stock purchase fund. And as ownership of the institution is acquired, it becomes obvious that in addition to the present 40% of the profits now received, the employees will also get the other 60 per cent in the form of increase in surplus and undivided profits as well as dividends.

The plan is not substituted for salary adjustments. The scale of pay and rate of advancement in compensation is in no way interrupted by the new arrangement. The bank maintains its standard of remuneration without reference to the amounts received by the employees through their ownership of stock.—[V. P., F. R. Kerman, in American Bankers Association Journal, September, 1925, used by permission.]

(a) Determine what motives led the management of the Bank of Italy to adopt this scheme of employee control. (b) Will it promote loyalty of personnel? efficiency? (c) "Every employee is consciously striving to make a better job of the bank's management, to the end that the customers will be completely satisfied." Why is this likely? (d) Can the success of the bank during the first six months of the scheme be ascribed to the scheme?

CHAPTER VI

DEPOSIT FUNCTION

138. Bank Balance and Interest Thereon

Mr. B carries his account with the Seaboard State Bank of Troy, with the understanding that he is to pay exchange charges on all checks deposited with his bank and payable outside New York City. Further he is to be paid interest at 2% per annum on all balances over a daily average of $1,000.

On March 1, B had a balance of $1,500. The following deposits and withdrawals were made:

DEPOSITS:

March 10	
Checks on Chicago bank	$ 500
Checks on New York banks	600
Banker's acceptance due 15 days hence discounted at 4%, face value	700
March 15	
Checks on Boston banks	$1,000
Checks on New York banks	1,000
Cash	100
Discounted 30-day promissory note at 6%, dated March 15, face value	500

WITHDRAWALS:

March 5	$ 600
" 12	600
" 20	500
" 25	450

(a) Prepare a statement showing the amount of balance held by B. at his bank each day till April 1. Assume that the acceptance is payable in Troy, and the note is payable at the Seaboard State Bank. Assume that the proceeds of the checks on the New York banks are not available for one day, on the Boston banks for two days, and on the Chicago banks for three days. (b) Calculate the interest due him on his balance on April 1 for the month of March.

139. Customer's Account Current

John Doe, a customer of the Columbia National Bank of New York City, had a deposit balance of $2,508.50 on September 1, 1926. During the month of September, he carried out the following transactions:

1. Deposited checks and cash to the credit of his account on September 15, amounting to $1,500.75.

2. Discounted his own notes at this bank as follows: A 60-day note of $800, on September 5, 1926, at 6%. A 90-day note of $1,500, on September 15, 1926, at 6%. Proceeds in both cases were credited to his checking account.

3. Drew checks against his account as follows: September 5, $750.85; September 10, $250.10; September 12, $56.87; September 16, $653.13; September 20, $387.63; September 25, $98.66.

(a) Prepare a statement showing his balance as of the close of business on September 30, 1926. (b) How much did the bank receive in the form of "discounts unearned" from him during the month?

140. Earnings of Savings Accounts

I. Suppose you were able to save $49 monthly and you had the option of depositing it in three different banks: Bank A paying 4½% compounded semi-annually, Bank B paying 3¼% compounded quarterly, and Bank C 2¾% compounded monthly. You have a fourth option of investing in 4¼%, $50 Liberty bonds which you can purchase on the market for $49 (a) Determine which would be the most profitable course to pursue and show how you arrive at your conclusions.

II. The Chicago National Bank maintains a thrift department in which it pays 3% interest compounded monthly on all deposits received on or before the 5th of each month. John Jones made the following deposits: January 1, $600; January 6, $600; February 5, $200; February 27, $300; March 3, $300. (a) Calculate the amount due John Jones on April 1. (b) If the depositor had drawn out $400 on March 1, what would his balance have been on April 1?

141. Classification of National Bank Deposits

(a) Tabulate the demand and time deposits for all national banks for some date during 1926. (Use Report of Comptroller of the Currency, which gives these data for each call or report made by national banks for that year), showing the volumes of each class of deposits as follows: (1) central reserve cities, (2) reserve cities, (3) country banks. (In tabulating follow the regional classification given in the Annual Report of the Comptroller of the Currency. Use totals for regions rather than for cities and states.)

(b) Work out percentages showing the proportion of each class of deposits in each division of question (a-1, 2, 3) i.e., what per cent of deposits in central reserve cities are time and what demand. (These

percentages can be included in table covering question 1 if the student prefers.)

(c) How do you account for the fact that there is a wide variation in the percentages of demand to time deposits in the different classes of banks, i.e., central reserve, reserve city, and country banks? (d) Is there any marked difference in the ratio of demand to time deposits of country banks in different regions of the United States? If so, explain or give reasons for such variation. (e) What per cent of all demand deposits in the national banks are individual deposits subject to check? Of what does the remainder largely consist? (f) How many national banks in 1926 had savings departments? (g) When and why did St. Louis cease to be a central reserve city?

142. Net Demand and Time Deposits of All Member Banks in Six Federal Reserve Districts, 1923 to 1926

The following table showing the volume of time and demand deposits has been prepared from data published in the Annual Reports of the Federal Reserve Board in order to make a comparison of demand with time deposits in certain federal reserve districts. These data are segregated according to size of the cities in the Annual Reports of the Board.

NET DEMAND AND TIME DEPOSITS OF ALL MEMBER BANKS IN SIX FEDERAL RESERVE DISTRICTS

(000,000 omitted)

	New York		Atlanta		Chicago	
	Demand	Time	Demand	Time	Demand	Time
Dec. 26, 1923	5,303	1,669	508	323	2,092	1,560
Dec. 24, 1924	6,528	2,019	562	349	2,345	1,733
Dec. 23, 1925	6,496	2,181	825	460	2,429	1,888
Dec. 29, 1926	6,634	2,456	631	437	2,449	1,930

	St. Louis		Minneapolis		San Francisco	
	Demand	Time	Demand	Time	Demand	Time
Dec. 26, 1923	642	386	407	409	1,266	991
Dec. 24, 1924	710	430	494	426	1,311	1,151
Dec. 23, 1925	757	447	466	435	1,335	1,302
Dec. 29, 1926	737	478	424	434	1,336	1,456

(a) In what districts is the volume of time deposits largest? How can you account for this? (b) Is there any tendency for time deposits to increase at a greater rate proportionately than demand deposits? Is this true of all banks in this country as a general thing?

143. Deferred Credit Items

The Columbia National Bank of New York received from a depositor, John Doe, on September 15, checks amounting to $2,368.96. The checks were sent immediately to the transit department and forwarded to the Federal Reserve Bank of New York for collection. The time at which these funds became available for use by this bank at the Federal Reserve Bank varied somewhat due to the time required in collecting them. The following is a list of the checks deposited together with the name of the city, state and bank on which the checks were drawn:

City	State	Name of Bank	Amount
Cincinnati	Ohio	The First National Bank	175.00
Nashville	Tenn.	American National	140.00
Boston	Mass.	Commercial National	500.00
Los Angeles	California	Citizens National	750.00
New Orleans	La.	Whitney Central National	350.00
Portland	Oregon	Northwestern National	50.00
Dallas	Texas	National Bank of Commerce	37.50
Salt Lake City	Utah	Utah State National	125.50
San Francisco	California	Crocker National	162.00
San Francisco (country)	California	Union National of San Diego, San Diego, Cal.	33.96
El Paso (country)	Texas	First National of Pecos, Pecos, Texas	45.00
			$2,368.96

(a) Prepare a table showing the time required by the Federal Reserve Bank to collect each item and the time at which it becomes available at the reserve bank for use by the Columbia National Bank. (b) In the case of the last two checks on the list, how are the funds transferred to the Federal Reserve Bank of New York?

144. Checks for Small Amounts

No person shall make, issue, circulate, or pay out any note, check, memorandum, token or other obligation for a less sum than one dollar, intended to circulate as money or to be received or used in lieu of lawful money of the United States; and every person so offending shall be fined not more than $500 or imprisoned not more than six months, or both.—[Rev. Stat. U. S., sec. 3583; Act March 4, 1909, sec. 178; 35 Stat. U. S. 1122.]

(a) Does this statute prohibit the issue of checks in any amount, no matter how small, for ordinary purposes? (b) What precautions should be taken in writing a check for less than one dollar? (c) May a trolley company legally issue transportation tokens in metallic disc form?

145. Interest on Average Daily Balances

Richard Roe, a depositor in the Chicago National Bank, had on December 1, a balance of $1,000. The following deposits and withdrawals were made:

DEPOSITS:	December	2	$300
	"	5	500
	"	10	800
	"	16	900
	"	20	300
	"	26	200
	"	30	500
WITHDRAWALS:	December	3	$600
	"	8	500
	"	15	300
	"	21	400
	"	25	300
	"	31	200

(a) What was the balance on January 1? (b) What was his average daily balance? (c) If the bank paid 2% on all funds over an average daily balance of $750, what was the balance on January 1?

146. Obligations of Acceptor

A had given B a check on the C bank for $200.

"Is A's check for $200 good?" B wired to the C bank.

"We have funds to pay A's check for $200," the bank wired back.

B took the check and the telegram to the D bank, which wanted to make doubly sure before cashing the check.

"Confirm your wire to B that you will honor A's check $200," the D bank wired to the C bank.

"This confirms our telegram to B that we have funds to pay A's check for $200," the C bank replied, refused to honor the check when presented, the D bank sued, and the Louisiana Supreme Court decided that it had no case against the C bank.

"The telegram seemed to have been carefully worded for guarding against acceptance or promise to pay," said the court.

The full report of the case will be found in 91 Southern Reporter, 405. —[M. L. Hayward.]

(a) What is the law of this case?

147. Growth of Certified Checks of National Banks of New York City

THE AMOUNT OF CAPITAL AND CERTIFIED CHECKS OR ACCEPTANCES OUTSTANDING
(000,000 omitted)

Date	In All Banks			In Nine Selected Banks		
	No. of Banks	Capital	Certified Checks	No. of Banks	Capital	Certified Checks
June 30, 1875.....	48	$68.5	$41.2	9	$18.3	$25.9
June 30, 1876.....	47	66.4	36.9	9	17.1	22.9
June 22, 1877.....	47	57.4	29.5	9	14.3	19.2
June 29, 1878.....	46	55.6	42.6	9	13.8	29.1
June 14, 1879.....	47	50.8	44.5	9	11.7	30.3
June 11, 1880.....	46	50.5	75.7	9	11.7	54.5
June 30, 1881.....	48	51.2	78.1	9	11.7	53.8
July 1, 1882.....	50	51.2	65.1	9	11.7	45.6
Oct. 3, 1882.....	50	51.7	137.3	9	11.7	105.5

(a) Note the high concentration of the practice of certification in the nine banks. (b) Calculate the ratio of certified checks to capitalization. Is this growing ratio a sure evidence of growing weakness of the banks? Would the ratio of certified checks to cash reserve have been a better measure of the danger? (c) Get a chart of stock exchange activity and note whether this growing practice of certification was paralleled by increased activity of the market? (d) Take a recent return of the members of the New York Clearing House and compute the ratio of certified checks to capital, reserve, deposits, and liability for acceptances for customers. (e) What legislation did this very rapid growth of certification precipitate?

148. Certification and Acceptance of Checks

I. Section 5208 on the Revised Statutes:

" . . . Unlawful for any officer, clerk or agent of any national banking association to certify any check drawn upon the association, unless the person or company drawing the check has on deposit with the association, at the time such check is certified, an amount of money equal to the amount specified in such check." (1869)

Section 13 of the Act of July 12, 1882:

" . . . . any officer, clerk or agent of any national banking association who shall willfully violate the provisions of an act entitled 'An act in reference to certifying checks by national banks', approved March third, 1869, being Section 5208 of the Revised Statutes of the United States, or who shall resort to any device, or receive any fictitious obligation, direct or collateral, in order to evade the provisions thereof, or who shall certify

checks before the amount thereof shall have been regularly entered in the credit of the dealer upon the books of the banking association, shall be deemed guilty of a misdemeanor, and shall, on conviction thereof . . . . be fined . . . . or . . . . imprisoned . . . . or both . . . . "

(a) At what methods of evasion of the Act of 1869 was the Act of 1882 aimed?

II. After the passage of the Act of 1882 the bank *accepted* checks which had been drawn upon them instead of certifying them, and assumed that such acceptance was not a violation of law. In some cases these acceptances were made payable through the clearing house, the effect of which form of acceptance was that such checks were payable on the following day; in other cases the acceptance was made without any condition as to the mode of payment. The banks claimed that they had the power to accept checks under the third and seventh paragraphs of section 5136 of the Revised Statutes, the former of which authorized national banks "to make contracts," and the latter provided for the "exercise of all such incidental powers as shall be necessary to carry on the business of banking." It was also claimed that section 5209 of the Revised Statutes, which provided that it shall be a misdemeanor for an officer of a bank to make acceptances without proper authority, by implication authorized acceptances to be made with the authority of the directors, and that the Act of 1882 did not, in plain words, prohibit such acceptance. [Report of the Comptroller of the Currency, 1882, p. 27.]

(a) Is there any legal difference between certifying and accepting a check? (b) Has a national bank the legal right to accept checks drawn upon it, unless the drawer has the amount stated in the check actually on deposit in the bank? (c) If a national bank has the power to make such an acceptance, would such acceptance at a time when the money was on deposit to the credit of the drawer be a liability to it for money borrowed, and as such be required to be limited to one-tenth of the paid-in capital of the bank, as provided by section 5200 of the U. S. Revised Statutes? (d) If a national bank has the power to accept such checks equal in amount in any one case to one-tenth of its capital, would the acceptance of any number of checks to an amount exceeding, in the aggregate, the amount of its paid-in capital be in violation of section 5202 of the U. S. Revised Statutes? [See the answers given to the above questions by the Attorney-General in 1882. Report of the Comptroller of the Currency, 1882, pp. 28-9.] (e) Did the Federal Reserve Act authorize national banks to accept checks drawn upon them? (f) Is the device of the one-day loan made in order to evade the above statutes? If so, why is the method countenanced by the government?

149. Maturing of Certificates

"Lend the X Corporation $10,000 and we'll deposit that amount in your bank on a certificate of deposit," the Y Corporation suggested.

"Yes, if we can put in the certificate that it's not payable till the loan is paid off," the bank proposed. The Y Corporation agreed, but sued the bank on the certificate before the loan was liquidated.

"We're not bound by any transactions between you and a third party," the Y Corporation argued, but the U. S. Circuit Court of Appeals ruled in favor of the bank.—[M. L. Hayward.]

(a) What is the law of this case?

150. The Problem of Guarding against Check Forgers and Burglars by American Bankers' Association

Bankers must be continuously on their guard against the operations of thieves, burglars, forgers, etc. Some of these operators do their work on a national or international scale by going from place to place and forging checks as they go. It is a common practice to pose as the representative of a large business firm in a distant city, to deposit bogus checks and then use funds before the checks can be collected. The following quotations give two cases:

"A clever check operator, using the name Roy A. Acree (2574), recently visited Greensboro, N. C., and made a cash deposit of $500 in a bank there, stating he represented the National Fabricating Steel Company of Pittsburg, Pa.

"Ten days later he drew a check against this firm, the unsuspecting member advanced him some cash before the check was returned through the clearings and the drawee bank advised the check was a forgery."

"P. J. Smith (2572), alias Robert Davis, left a trail of counterfeit $50 traveler's checks ostensibly issued by the Bank of Montreal, Canada, payable through the National City Bank of New York, in his wake after passing through Denver, Colo., and Kansas City, Mo. They differ from the original checks of this bank in several respects. They bear the signatures of Chas. M. Henley as President and Oscar Morrison as Cashier, which do not appear on genuine checks. The border scroll of the counterfeit is printed in a light green tint, while the scroll of the genuine checks is black and white, bordering a pale green body. Nothing is known about the operator himself at this time, but member banks receiving any of these counterfeits are requested to notify their local police."

The Protective Department gives out through the American Bankers Association Journal the following statistics covering its operations from August 31, 1926, to February 1927:

Statistics of the Protective Department

	Awaiting Trial Sept. 1, 1926	Arrests: Reported Since Aug. 31, 1926	Arrests: Reported in Jan., 1927	Arrests: Total	Dispositions: Convicted	Dispositions: Discharged or Acquitted	Dispositions: Fugitives Escaped, Insane or Dead	Total Awaiting Trial
Forgers	158	67	40	107	63	18	3	181
Burglars	39	1	2	3	4	...	1	37
Holdup robbers	115	40	13	53	39	8	4	117
Sneak thieves	3	...	...	...	...	...	...	3
Total	315	108	55	163	106	26	8	338

[American Bankers Association Journal, February, 1927, section II, by permission.]

(a) Suppose Bank A pays a forged check for $500 drawn against one of its depositors. The check is held until the end of the month when it is sent to the customer with other cancelled checks. The customer returns this check to the bank and demands that his account be credited for the amount. Which party must stand the loss? What recourse is there on the party presenting the check to the bank? (b) Suppose the customer had issued the check for $100 which was later raised to $500 and this was paid by the bank. What would be liability of the bank in this case? (c) Is the large number of bank forgeries, robberies, etc., due to our bad banking laws? Explain. (d) What precautions, if any, may banks take to guard against these dangers?

151. Proposed Law against Over-Certification

In 1887 the Comptroller of the Currency proposed the following provisions as amendments or substitutes for the laws against over-certification:

It shall be unlawful for any officer, clerk, or agent of any national banking association to certify, accept, or otherwise render the bank liable for any check drawn upon the association, unless the person or company drawing the check has on deposit with the association, at the time such check is certified, an amount of money equal to the amount specified therein. Any check so certified by a duly authorized officer shall be a good and valid obligation against the association; but for any act of any officer, clerk, or agent, in violation of this section, the Comptroller of the Currency may assess a penalty upon such association not exceeding one per centum of the amount so unlawfully certified.

The prohibition of the preceding section shall not apply to the certification of checks drawn by regular customers of an association to meet drafts drawn upon them to which bills of lading or transportation receipts for produce or marketable commodities or securities are attached, if these, or other securities equally valuable and convertible, are held by the certifying bank until the overdraft is made good.

(a) Why was it believed that a 1% fine would avail to stop the practice of over-certification, if imposed upon the bank itself, whereas a severe penalty of fine or imprisonment imposed upon the officer would not avail? (b) What is the logic of exempting over-certification when collateral accompanies the draft or is deposited with the drawee bank?

152. Use of Certified Checks in Call Loan Market in New York

The New York City banks furnish certified checks to the same class of operators (the speculators) to an amount ranging from $110,000,000 to $120,000,000 daily, and these checks are made to swell the amount of individual deposits. They are credited to the depositors as money, and are circulated and treated as money by the banks and by their customers; yet, when ascertaining the amount of deposits upon which they must hold a

reserve, or upon which they must pay taxes, the banks invariably deduct all such checks on hand. . . . The use of certified checks is a direct inflation to that extent.—[Annual Report of the Comptroller of the Currency, 1868, p. XXIII.]

(a) How could the over-certification of checks be used "to swell the amount of individual deposits"? (b) What was the purpose of the bank in over-certifying checks for brokers in the stock and gold speculative markets? Was it a defensible practice? What danger was attendant upon it? Should reserves have been carried against certified checks? (c) Does the present practice of "one-day loans" correct the danger? Are these loans secured? Under the old scheme could the over-certifying bank have been protected by previously pledged securities? Is the "one-day loan" method an evasion of the law against over-certification of checks? (d) "The use of certified checks is a direct inflation to that extent": an inflation of what?

153. Clearing and Collecting Credit Instruments

Suppose that a small bank in a country town, about 50 miles from New York, on June 30 receives the following credit instruments from one of its merchant depositors:

1. A check for $1,000 on the B National Bank of St. Louis.
2. A check for $750 on a New York City Bank.
3. A promissory note for $1,500, bearing 6% interest due in 30 days, payable at this bank, on Mr. B. who is a real estate dealer in the town.
4. A trade acceptance for $1,000, payable at sight, on the X Manufacturing Company at Boston.
5. Coupons from Liberty bonds amounting to $600.

(a) Would the bank accept each of these items for deposit? (b) How many banks should there be in the town before a clearing house association is advisable? (c) If the promissory note were discounted, what credit would be allowed, if the rate of discount was 5½%? Show actual amount. (d) Would immediate credit be allowed for the check listed in (1)? (e) Outline the steps this bank would take to collect the trade acceptance? (f) How would this bank dispose of the coupons from the Liberty bonds? Are they credit instruments? If so, what kind of credit do they represent? (g) Wherein does the New York practice today differ from that in 1925?

154. Rates of Domestic Exchange

Average charge per $100 for exchange drawn by national banks in each state during year ending June 30, 1892:

Maine	0.01 cents	Ohio	0.02 cents
New Hampshire	.08	Indiana	.06
Vermont	.03	Illinois	.01
Massachusetts	.004	Michigan	.04
Rhode Island	.0015	Wisconsin	.04
Connecticut	.01	Iowa	.04
New York	.03	Minnesota	.03
New Jersey	.002	Kansas	.04
Pennsylvania	.02	Nebraska	.02
Delaware	.007	Nevada	.12
Maryland	.01	Oregon	.03
District of Columbia	.04	Colorado	.03
Virginia	.06	Utah	.07
West Virginia	.07	Idaho	.07
North Carolina	.09	Montana	.07
South Carolina	.08	Wyoming	.08
Georgia	.14	New Mexico	.10
Florida	.01	North Dakota	.07
Alabama	.12	South Dakota	.07
Mississippi	.12	Washington	.05
Louisiana	.05	Arizona	.17
Texas	.13	California	.06
Arkansas	.09	Oklahoma	.14
Kentucky	.03	Indian Territory	.11
Tennessee	.08		
Missouri	.02	Average United States	0.03 cents

[Report of the Comptroller of the Currency, 1892, p. 30.]

(a) The total amount of exchange drawn amounted to $12,994,-959,590: estimate the total earnings of the reporting banks from this source. (b) Account for the low rates of Massachusetts as against the high rates of New Hampshire, North Carolina, Arizona, or North Dakota. (c) How did the federal reserve system tend to equalize domestic exchange rates, and to reduce them?

155. Clearing-House Certificates

Section 5192 Revised Statutes provides that clearing-house certificates, representing specie or lawful money specially deposited for the purpose, of any Clearing House association, shall also be deemed to be lawful money in the possession of any association belonging to such Clearing House holding and owning such certificate; and Section 5193 provides that the Secretary of the Treasury may receive United States notes on deposit, without interest, from any national banking associations, in sums not less than ten thousand dollars, and issue certificates therefor in denominations of not less than five dollars, which certificates may be counted as part of the lawful money reserve, and may be accepted in the settlement of clearing-house balances at the places where the deposits therefor were made. Legal tender note certificates were first issued in..1873. . . . . The issue of gold certificates was authorized in . . . . the act of March 3, 1863, and they were used for clearing-house purposes soon after the passage of the national-bank act. The first issue was made on November 13, 1865. . . . . The issue of these certificates was discontinued on December 1, 1878. . . . The issue of gold certificates having been discontinued by the government, and

the amount of gold coin having rapidly increased, the banks in New York found it necessary to establish a depository of gold coin for the convenience of the Clearing House. This depository at the present time is the Bank of America, by which bank certificates of deposits were first issued on October 14, 1879. . . . . The Clearing Houses of Boston, Philadelphia, and Baltimore have organized similar depositories in order to utilize their gold coin and save the risk and inconvenience of handling and transporting the coin itself.—[Report of the Comptroller of the Currency, 1880, XXXI-XXXII.]

(a) Distinguish between "clearing-house certificates" of the above character and "clearing-house loan certificates," in nature and purpose. (b) Was there any essential difference between the clearing-house certificates issued for gold by the Bank of America and the gold certificates issued by the United States Treasury? (c) Why should the government issue certificates against deposits of legal tenders? In what ways were they better for clearing-house purposes than the legal tenders themselves? (d) When did the New York Clearing House cease employing the Bank of America to issue gold certificates and commence to issue its own certificates? (e) Why did the establishment of the federal reserve system obviate the need of issue of clearing-house certificates? of clearing-house loan certificates?

156. Instruments Used in Settling Clearing-House Balances

Returns, from 66 of the 78 clearing houses active, for July 1, 1896:

Total clearings for the day		$227,935,464
Balances settled in cash or cash exchanges		19,152,834
Gold	$1,325,015	
Gold clearing-house certificates	265,000	
Silver and silver certificates	175,950	
United States notes	3,451,761	
Currency	1,017,101	
Currency certificates	5,785,000	
National bank notes	31,746	
Exchanges	3,088,299	
Managers' certificates	3,904,904	
Collections by creditor from debtor bank	85,930	
Not stated	22,128	

[Report of the Comptroller of the Currency, 1896, p. 97.]

(a) Maine banks used the method of "Collections from debtor banks." No gold or gold certificates were used in New England or in the South. Massachusetts, Rhode Island and Connecticut used "exchanges." The South used largely "managers' checks or orders." The Pacific States used gold and gold certificates. New York, Pennsylvania used gold, paper currency, exchanges, and managers' checks. Account for these differences of practice.

157. Terms of the Clearing-House Certificates of 1890

In New York:

loan certificates bearing interest at 6 per cent per annum, and in addition thereto a commission of one-quarter of 1 per cent for every thirty days such certificates shall remain unpaid, and such loan certificates shall not be in excess of 75 per cent of the market value of the securities or bills receivable so deposited

In Boston:

loan certificates bearing interest at 7.3 per cent per annum, and such loan certificate shall not be in excess of 75 per cent of the market value of the securities or bills receivable so deposited

In Philadelphia:

loan certificates bearing 6 per cent interest on the deposits of bills receivable and other securities to such an amount and to such percentage thereof as may in their (the loan committee's) judgment be advisable

(a) Compare the loan certificates as to safety. (b) What was the purpose of the commission charged in New York? (c) Suggest reasons for the different rates of interest borne.

158. Incidence of Loss from Clearing-House Loan Certificate Plan

Resolution of the New York Clearing House Association, November 11, 1890:

Resolved, That any loss resulting from the issue of loan certificates shall be borne by the banks comprising the Clearing-House Association pro rata of capital and surplus, and this resolution shall be ratified by the boards of the respective banks, members of the association, and a certified copy of such consent delivered to the chairman of the loan committee.

Resolution of the Boston Clearing-House Association, November 17, 1890:

Resolved, That any loss arising from the issue of loan certificates shall be borne by the banks comprising the Clearing-House Association pro rata, according to the average daily amount which each bank shall have sent to the clearing house during the preceding year.

Resolution by Clearing-House Association of Philadelphia, November 18, 1890:

. . . . any loss caused by the non-payment of the loan certificates shall be assessed by the committee upon all the banks in the ratio of capital.

(a) Has a national bank the legal right to assume responsibility for losses of this kind? (b) Which is the fairer method of assessment

of loss, on the basis of capital and surplus, or on the basis of the average daily clearings for the preceding year?

159. Collecting Drafts

A Shoe Manufacturer in Lowell, Mass., holds a 60-day draft on one of his customers in San Francisco for $8,000, payable at the Golden Gate National Bank of San Francisco. The Shoe Manufacturer places the draft with his bank in Fall River for collection.

(a) Outline the steps which the Fall River Bank will take in order to secure payment. (b) In what different ways may the Bank in San Francisco remit the funds to the Fall River Bank? (c) In what different ways may the customer settle this draft? Which is the most convenient and economical for him? Why?

160. The Relation of Loans to Deposits

I. (a) In Phillips, Bank Credit, the term "derivative deposits" is used: to what does it refer? (b) In a bank statement may the amount of deposits exceed that of loans and discounts? May the amount of loans and discounts exceed the amount of deposits? (c) If a borrower does not immediately check against his balance, why does he borrow so soon? If he does draw at once, is he still a depositor? (d) If the borrower takes his proceeds in bank notes, is the percentage reserve against deposits changed? Is the relation of deposits to loans changed? (e) If a bank loans to five times its cash reserve, is it in effect loaning the same money five times and therefore making five times the interest rate charged?

II. The expansion of bank loans and investments, on the one hand, and of bank deposits, on the other, move together. From the standpoint of the individual bank, loans and investments appear to grow out of deposits. As a bank's deposits increase, it can expand its loans and investments. From the standpoint of the country as a whole, however, the causation runs chiefly the other way. Bank deposits expand primarily because loans and investments expand.—[Chase Economic Bulletin, November 8, 1926, p. 11, courtesy B. M. Anderson, Chase National Bank, New York.]

(a) Examine the logic of this proposition.

161. Relation of Bank Deposits to Bank Loans and Discounts

(a) Select ten national banks: three in New York City, two in Chicago, two in St. Louis, two in San Francisco, and one in New Orleans. Tabulate and compare the changes in the volume of deposits with the changes in loans and discounts for a period of five years. [Use reports of the Comptroller of the Currency to secure the neces-

sary figures.] (b) What inference can you draw from these figures as to the relations between deposits on one hand and loans and discounts on the other? (c) Would you go so far as to say that a very large percentage of all bank deposits in this country originate through loans and discounts? Explain. (d) Is a bank justified in requiring its borrowers to keep, for example, 20% of the loan as a monthly average balance with the bank? Why? (e) Why is this requirement more common in large financial centers than in rural communities?

162. Relation of Deposits and Loans and Discounts

His (Mr. Leaf's) contention is that a bank as such has no power to expand or contract the volume of credit; and by a bank he means not only an ordinary deposit bank, but also a central bank. The creation of credit can be effected only by the depositing public or the note-issuing authority. Many passages (in his book, Banking, 1927) compel us to hold that this is his view. For instance, on p. 175 he claims it as his "fundamental theme that alike the creation and restriction of credit generally are in the hands of the government, in other words, of the Treasury and the Bank of England *acting as a Bank of Issue.*" This is surely saying that the banking department of the Bank can by itself have no influence on the state of credit. —[*Economic Journal,* March, 1927, p. 78.]

(a) What is Leaf's argument for this lack of relationship? (b) Criticize his position with respect to an ordinary deposit bank; with respect to the central bank; with respect to the banking system as a whole.

163. Borrowing by Means of Certificates of Deposit

A country bank wants to borrow money, issues its certificate of deposit, either time or demand, in favor of the city correspondent, and sends the same forward, accompanied by bills receivable as collateral, and requests the loan, which is granted. As a result, the country bank adds to its liabilities by increasing the amount due depositors, and adds to its assets by increasing the amount due from banks, and its published report of condition shows no bills payable. In other words, does not show the true condition of the bank. It is perfectly legitimate and proper for a bank to rediscount its receivables or borrow money, and all interior banks do at certain seasons of the year, when crops are being moved, for instance. Whatever the form of instrument used in borrowing money, it is a bill payable and should be so reported. Reserve banks can aid the cause of good banking by requiring notes instead of certificates of deposit.—[Report of the Comptroller of the Currency, 1892, p. 39.]

(a) Why should a bank seek to conceal its borrowings by use of certificates of deposit? (b) If it borrowed by bills payable or rediscounting, no reserve is required by law against the liability thus created; but a reserve must be kept against its deposits. What com-

pensating advantage is realized by use of certificates of deposits in borrowing? (c) Does it make any essential difference whether a bank owes the amount to other banks under the name "deposits" or "bills payable"? Is there any essential difference between the liabilities so classed? Is it logical to regard a depositor as a lender of funds to a bank? Is not the essential principle of banking the lending of funds to a bank by depositors and the borrowing of funds from the bank by borrowers?

164. Interest on Bank Balance

On July 1, Company A, a manufacturing concern, negotiated a loan of $150,000. The bank discounted A's collateral note for 60 days for the above amount at 6%. The bank required an average balance of $10,000 and paid 2% for any amount above this. The following withdrawals were made by A:

July 10	$60,000
July 25	5,000
July 30	7,500
Aug. 1	30,000
Aug. 5	17,000
Aug. 20	6,300
Aug. 30	14,000

(a) What was the balance on September 1? (b) How much (actual rate of interest) did the use of the money cost A?

165. Checks As Component of Circulating Media

How does each of the following factors affect the proportion which checks bear to the total amount of business payments in the United States?

(a) Comparative sparseness of population.
(b) The proportion of retail and wholesale trade.
(c) Proximity to a large commercial center.
(d) The industrial character of the region, whether agricultural or manufacturing.
(e) The length of the wage period.
(f) The habit of paying wages by check.
(g) The rate of wages, or rather the range of incomes.
(h) The scale of prices.
(i) The phase of the business cycle.
(j) Changes in the quantity of government or bank notes.
(k) The season of the year.
(l) The scale of industry.
(m) The status of business confidence.

(It is suggested that the student see the Report of the Comptroller of the Currency for 1896 for statistical data on these points.)

166. Effect of High Bond-Deposit Requirement on the National Banks

The proposed code divides the banks into two classes, those with a capital of $250,000 and less, and those of which the capital exceeds $250,000, and reduces the amount to be deposited by the smaller banks from one-fourth to one-tenth of their capital, and that to be deposited by the larger banks from $50,000 to $25,000.

The reason for the change is that the bond requirement is a serious impediment to the absorption into the national bank system of the State banks, which are still numerous in those sections which were more or less excluded from early participation in the privileges of the acts of 1863 and 1864; and it is also an impediment to the formation of new banks of large capital.—[Report of the Comptroller of the Currency, 1887, p. 5.]

(a) How did the bond-deposit requirement impede the entry of state banks into the national bank system? impede the founding of new national banks with small capitalization? In what regions were national banks rarest? Why? (b) How did the bond requirement impede the founding of new banks with large capitalization? In what districts was this impediment felt?

167. National Banks Not Eligible to Join Oklahoma Deposit Guaranty System

Opinion of the Attorney General of the United States, July 28, 1908:

The business of insuring their depositors against loss through the methods provided by the Oklahoma law is essentially foreign to the legitimate functions of a national bank as an instrument of government. But this is not an insurance of *its* deposits; the action involves essentially a guaranty to the depositors of all state banks in Oklahoma and other national banks in that State which may accept the terms of the law. The assessments might conceivably absorb the entire sum of the aggregate assets of the guaranteeing banks. A national bank has no power to guarantee the obligations of a third party, unless in connection with a sale or transfer of its own property, and as an incident to the banking business.—[Report of Comptroller of the Currency 1908, pp. 70-72.]

(a) Develop the above abstract of the Attorney General's opinion.

168. Failure of the Oklahoma System of Guaranteeing Deposits

The most recent (1923) estimates as to the position of the Oklahoma state guaranty fund is that it faces a deficit of $4,500,000. It is

understood that of this amount there are $2,300,000 in warrants bearing 6% that were issued by the Oklahoma state banking department. A total of $2,200,000 is said to be due to the depositors of failed banks who counted upon the state guaranty but who have thus far received absolutely nothing from the state.

Under the state law, the guaranty fund is raised by an assessment of one-fifth of 1% on the average annual deposits of the state banks. Recent liquidations and transfers to the national banking system have reduced the amount available from this assessment each year to around $200,000. This is not even sufficient to pay interest at 6% on the $4,500,000 the state guaranty fund owes, to say nothing of the principal. Under the law, no more can be collected than one-fifth of 1%.

Of the warrants outstanding, the major portions, or practically all, are held by state banks that purchased them as investments. The warrants were issued to raise money to pay depositors of banks that failed. Bankers who have followed the Oklahoma situation closely say that no single bank is carrying so many warrants as to endanger its position.

(a) What does it mean to say that the guaranty fund faces a deficit? (b) In what two ways did failures of state member banks affect the fund adversely? (c) Why, under the operation of the guaranty system, should state banks transfer to the national bank system? What was the effect of such transfers upon the fund? (d) What was the nature of the 6% warrants? Were they good investments? Was there any objection to state banks buying them? Under the plan, if a solvent state bank bought one of these warrants, who immediately and who ultimately paid the depositors of the failed banks? (e) Argue that the State should assume the burden of these warrants and the deficit of the fund.

169. Bank Losses Saved under Deposit Guaranty

The records show that for the 33 years, from 1881 to 1914, the losses to depositors which arose from national bank failures averaged annually during that period 0.028 of 1% of the aggregate deposits of the national banks during those years. During the fiscal years ending June 30, 1915, 1916, and 1917, the percentage of losses of failed banks to total deposits of all banks averaged only about 0.003 of 1%, or less than one-eighth of what the losses averaged in the preceding 33 years. The largest losses to depositors reported for banks failing in any one year was for the year ending June 30, 1897, when the losses represented 0.152 of 1% of the aggregate deposits of all the

national banks at the time. This was more than forty times the percentage for the three years 1915, 1916 and 1917.

(a) Does the smallness of the ratio of losses to aggregate deposits mean that the losses do not warrant a system of insurance of deposits, or does it argue that the system could be cheaply run? Formerly, it was the practice for persons who flew by airplane from London to Paris to insure their lives before starting; more recently the practice is abandoned. Does this change offer any suggestion as to the advisability of insuring deposits? (b) How does the fact that losses vary so widely from year to year, and from section to section, affect the question of the desirability of deposit guaranty?

170. Guaranty by National Bank

A national bank has no power to give an accommodation guaranty, and such a guaranty is not enforceable against the bank. [Bowen *v.* Needles National Bank, 94 Fed. Rep., 925.] A national bank has no power, either with or without consideration, to bind itself that a draft drawn upon one of its customers will be paid. [First National Bank of Moscow *v.* American National Bank, 173 Mo. 153.] A national bank may guarantee the payment of commercial paper as incidental to the exercise of its powers to buy and sell the same. [Thomas *v.* City National Bank of Hastings, 40 Neb. 501.]

(a) What is the line of argument and the banking policy behind these decisions? (b) May a bank guaranty paper by a contract to purchase and resell and thereby become indorser? (c) May a national bank become party to a system of guaranty of bank deposits in its own and other banks? [Dolley *v.* Abilene National Bank, 179 Fed. Rep., 461.] May it enter into any system of cooperative insurance, as, for instance, burglary insurance? (d) May a national bank become a partner in a venture and thereby become liable as a partner? (e) May a national bank become an underwriter in a flotation of securities by a bond syndicate?

171. Proposal for Nation-Wide System of Deposit Guaranty

Comptroller of the Currency, John Skelton Williams, in 1918, argued as follows for the guaranty of deposits of national banks:

> First. Such an absolute guarantee by the Government would bring from its hiding places many millions of dollars of hoarded money in all parts of the country, some of which is being kept in stockings and cupboards and some in safe deposit vaults.
>
> Second. The passage of such a law would give an absolute guarantee to

15,902,194 depositors in national banks, this being the number of deposit accounts on March 4, 1918, of $5,000 or less.

Third. The passage of such a law should practically prevent, in the future, runs of all national banks which may enjoy the protection of such a guarantee, with the many dangers and disturbances attendant upon such runs and the failures which so often follow them.

Fourth. The guarantee of bank deposits would give peace of mind, comfort, and convenience to the poor man and the poor woman who may have accumulated their savings of a lifetime in the savings departments of these banks.

Fifth. It is probable that nothing which has thus far been suggested would contribute more to the unification and solidarity of our entire banking system than the enactment of such a law as this. It is believed that it would have a paramount and deciding influence with the State banks in inducing them to nationalize to get the benefit of the Government guarantee of bank deposits.

Sixth. There is no force in the suggestion which has been urged that the guarantee of their deposits by the Government would have the effect of making national bank officers loose, lax, and careless in their methods and management.

Seventh. Under such a plan as is proposed, all banks will earnestly strive to inspire public confidence and maintain a good reputation, not only for the sake of protecting their stock investments but also for the sake of drawing to the bank the larger depositors—those whose accounts amount to more than $5,000.

(a) Take a position on each of the arguments offered by the Comptroller, either defending his position or refuting it. (His own developments of the arguments may be found in his annual report for the year.) (b) Which of these arguments are not applicable to the Oklahoma situation? (c) Why would the guaranty of deposits probably succeed better if adopted by all the banks, nation-wide, rather than by the banks of a single state or in one section of the country?

172. Guaranty of Deposits in Banks Which are Members of the Federal Reserve System

A Bill to provide for the guaranty of deposits in banks having membership in the Federal Reserve System, and for other purposes:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That for the purpose of guaranteeing depositors in banks having membership in the Federal reserve system against loss in the event of failure of any such member banks, the Federal Reserve Board is hereby authorized and directed to set aside in each Federal Reserve bank, annually a portion of the net earnings of such bank, such portion of said earnings for any one year not to exceed an amount equal to three ten-thousandths of 1 per centum of the total individual deposits in all the banks having a membership in any such Federal reserve bank; such portion of such net earnings so set aside as provided herein to be kept on deposit in each respective Federal reserve bank in a special fund to be known as the "Bank Depositors' guaranty fund," which

special fund is hereby created; and when funds deposited in such bank depositors' guaranty fund, as provided herein, equal one-half of 1 per centum of the total individual deposits of all member banks of any such Federal reserve bank, estimated as provided herein, according to the last regular bank statement, then said Federal Reserve Board shall temporarily postpone levying such assessments against the net earnings of such bank: Provided, That, the Federal Reserve Board shall keep each said bank depositors' guaranty fund, as nearly as practicable, equal to one-half of 1 per centum of the total individual deposits in such member banks as provided herein: Provided, further, That in estimating the total individual deposits in any Federal reserve district, only individual unsecured deposits on which interest not exceeding 3 per centum per annum is being paid, in sums of $5,000 and less, shall be considered and used: Provided further, That the several bank depositors' guaranty funds shall be construed as one fund, available for use as herein provided, in any Federal Reserve district.

Sec. 2. The Federal Reserve Board is hereby authorized and directed to make such rules and regulations as may be necessary to carry into effect the provisions and intent of this Act.—[68th Congress, 1st Session 1924, H. R. 7794.]

(a) What advantages, if any, has this system of guaranteeing bank deposits over that which has been tried in a number of states? (b) Would the proposed rate for the creation of a guaranty fund have been sufficient during the past 48 years to meet the losses incurred through failures? (c) Do you think that it would be fair to put the national banks on the same base as state member banks in this regard? Has the ratio of failures among national banks been larger or smaller than that of member state banks?

173. Reserves of National Banks

(a) Can a bank with deficient reserve borrow directly from a competitor member of the clearing house which has surplus reserves? If so, how? (b) Does a national bank's reserve constitute a definite limit to its loaning power? Does your answer extend to all the national banks as a whole? If all the banks entered upon an active lending policy, what would prevent an indefinite increase of loans? (c) Before 1914 was it possible for a national bank to exchange its notes for cash at an affiliated state bank and thus enlarge its reserve and loan power? Can it do it now? Is the combined loan power of the two banks increased thereby? Does the use of its bank notes for window payments conserve the bank's cash reserve and increase its loan power? (d) Trace the effect on reserves and loan power if one bank restricts its loans at a time when the others are enlarging theirs. (e) Is a tax on deficiency of reserves as good for its purpose as a tax on the excess issue of notes? (f) The advantage of having a secondary reserve depends much on the condition of the other banks: why?

174. Legal Provisions As to Reserves of National Banks

(a) What were the provisions of law with respect to the reserves of national banks in the following laws? (1) Feb. 25, 1863. (2) June 3, 1864. (3) The Revised Statutes of the United States, sections 5191, 5192, and 5195. (4) June 30, 1874. (5) March 3, 1887.

(b) In which of these acts was the following accomplished? (1) Distinction between reserve city banks and country banks. (2) Dropping of reserve against notes. (3) Separation of redemption fund against notes from the remaining reserve against deposits. (4) Shifting the redemption fund from redemption cities to the U. S. Treasury at Washington.

175. Form of Bank Reserves

Whereas before the war it was the custom for most central banks, and in many countries for various other banks as well, to hold substantial gold reserves and to scramble for additions thereto, the point has now been reached where not only are the internationally acceptable reserves of most countries consolidated in the hands of the respective central banks, but several of the latter, especially in the smaller countries, have to a large extent substituted stable foreign exchange values for gold as the ultimate reserves against currency and banking liabilities.—[Midland Bank, *Monthly Review,* June-July 1926, p. 1, by permission.]

(a) What forms do such reserves take? (b) To be real reserves what characteristic is absolutely essential? (c) Are these reserves "earning assets," and if so, is this a valid objection to them? (d) How do such reserves represent an economy in the use of the world's gold? (e) Why in the war and post-war period did such reserves develop in use? (f) How have the stabilization of currencies and the re-adoption of the gold standard been facilitated by this change in form of reserve? (g) Will the substitution lessen the responsiveness of price levels as between different countries? (h) Will it tend to lessen exchange rate fluctuations, since gold movements will be eliminated or reduced to a minimum? (i) Will this substitute for gold reduce the monetary demand for gold?

176. Computing Bank Reserves

The following is an actual statement issued by the Blankville National Bank (located in reserve city), as of the close of business on June 15, 1927.

THE BLANKVILLE NATIONAL BANK

(000 omitted)

RESOURCES		LIABILITIES	
Loans and discounts	$6,000	Capital	$2,000
Bonds and securities	500	Surplus	500
Stock in Federal Reserve Bank	75	Discounts unearned	75
Customers' liability under letters of credit	105	Deposits	6,100
Furniture and fixtures	200	Acceptances outstanding	100
Other resources	200	Letters of credit	5
Items with Federal Reserve Bank in process of collection (not available as reserve)	200		
Due from banks other than Federal Reserve Bank	300		
Due from Federal Reserve Bank	900		
Cash in vault	300		
	$8,780		$8,780

(a) Using the following form as a guide, compute the actual amount of reserves this bank should have on deposit at the Federal Reserve Bank of New York. (Form prepared by the Federal Reserve Board for the Computation of Reserves to be carried by member banks with Federal Reserve Banks.)

NET DEMAND DEPOSITS:

1. Deposits payable within thirty days not including U. S. Government Deposits and Items, 2, 3, 4 and 5			$.....
2. Balance due to banks other than Federal Reserve Bank (include Foreign Banks)	$.....		
3. Amount due to Federal Reserve Bank Deferred Credits	$.....		
4. Cashier's checks outstanding	$.....		
5. Certified checks outstanding	$.....		
Total due to banks (Items 2, 3, 4, and 5)		$.....	
Less			
Deductions of the following items are permitted only from the total of Items 2, 3, 4, and 5. Should the total of Items 6, 7, 8 and 9 exceed the total of Items 2, 3, 4 and 5, both groups must be omitted from the calculations.			
6. Balances due from banks other than Federal Reserve Bank and Foreign banks	$.....		
7. Items with Federal Reserve Bank in process of collection	$.....		
8. Exchanges for Clearing House	$.....		
9. Checks on other banks in the same place	$.....		
Total deduction (Items 6, 7, 8 and 9)		$.....	
10. Net Balance due to banks			$.....
11. Total Net Demand Deposits (Items 1 and 10)			$.....

TIME DEPOSITS:

12. Savings accounts (subject to not less than thirty days' notice before payment)	$.....
13. Certificates of deposit (subject to not less than thirty days' notice before payment)	$.....
14. Other deposits payable only after thirty days	$.....
15. Postal Savings Deposits	$.....
16. Total Time Deposits (Items 12, 13, 14 and 15)	$.....

(b) In the event this reserve is found below the minimum required by the Federal Reserve Act, what are the different ways in which this bank can restore its reserve?

(c) Do you think it has any eligible commercial paper which it can rediscount for that purpose? Why?

177. Reserve Requirements of Member Banks

The Buffalo State Bank, Buffalo, New York, filed an application with the Federal Reserve Bank of New York for membership in the federal reserve system. The condensed statement of the Buffalo State Bank as of the date of the application was as follows:

THE BUFFALO STATE BANK

(000 omitted)

RESOURCES		LIABILITIES	
Loans and discounts	$10,410	Capital	$ 2,000
Government bonds	200	Surplus	1,000
Other securities	200	Discounts unearned	63
Stock in Federal Reserve Bank	90	Deposits	
Customers' liabilities under letters of credit	114	Demand	8,000
Furniture and fixtures	241	Time (payable after 30 days)	2,000
Exchanges for clearing house	104	Acceptances outstanding	105
Items with Federal Reserve Bank in process of collection (not available as reserve)	100	Letters of credit	9
Due from Federal Reserve Bank	1,000	Certified checks outstanding	50
Due from other banks	600	Due to banks (other than Federal Reserve Bank)	400
Cash in vault	568		
	$13,627		$13,627

(a) What is the actual amount which this bank would have to deposit with the Federal Reserve Bank of New York as reserve? (b) What are the various ways in which this bank can build up its reserve? (c) What is a secondary reserve? What are the advantages of having a secondary reserve? The disadvantages? (d) What kind of commercial paper can be used for that purpose? (e) What is the reason, since the establishment of the federal reserve system, for requiring a higher percentage reserve in central reserve cities than in reserve cities?

CHAPTER VII

LOANS AND DISCOUNTS

178. Expansibility of Bank Loans

Assume that you are operating a bank in Boston, Mass., and that your bank has $1,000,000 in gold in its vaults. The gold is to be used as a reserve against deposits created by this bank's lending its customers funds on 90-day notes bearing 6% interest. Determine:

(a) What would be the total loans which could be extended on this basis? (b) What would be the amount added by your bank to its item "Discount Unearned" as result of these operations.

Now assume that the same bank is a member of the Federal Reserve Bank of Boston: (c) What influence would this gold have on the volume of loans and discounts if the member bank retained the gold in its own vaults? (d) What would be the total amount this bank could lend on this $1,000,000, if it were deposited in the Federal Reserve Bank of Boston, provided none of the paper arising out of such loans were rediscounted? (e) What would be the maximum amount which could be extended, if the member bank rediscounted all that was possible on the basis of this $1,000,000?

179. Nature of Commercial Loans

Which of the following are properly regarded as commercial loans? (a) A loan to a physician to pay for supplies and equipment for his office. (b) A loan to a farmer secured by a mortgage on real estate bought with the proceeds. (c) A loan to Brown Bros. & Co. of New York, secured by pledged government bonds, and used to finance the importation of raw jute. (d) A loan to a woolens manufacturer to finance the purchase of raw wool for making worsted cloth. (e) A loan to a contractor and builder to cover shingles used on a house he is building under contract to deliver in 60 days. (f) A loan to a merchant to finance a trip to Bermuda. (g) Sale of single-name paper to refund for the sixth time some maturing outstanding six months' notes.

180. Nature of the Balance Requirement

During one of the Liberty Loan campaigns a customer of a bank came to the cashier and said, "I have received numerous letters and circulars urging me to buy Liberty bonds. My money is all tied up in my business at the present time and I do not see how I can subscribe, but I want to make this suggestion. My borrowing line with you is $100,000, and in order to support this line I have to carry with you a balance of $20,000. I want to know if I buy $10,000 of Liberty bonds from you can I use half this balance and let you hold the other half of the balance and the bonds to support the line of credit?"

(a) Disregarding principles of patriotism, should the cashier have allowed this manner of subscription? (b) Which of the following are sound and justifiable reasons for requiring borrowers to carry certain minimum balances with the lender: (1) It will make the loan fund larger and more applicants can be satisfied. (2) It will increase the deposits of the bank. (3) The bank can lend at lower rates. (4) The borrower should reciprocate the bank's favor in lending to him by carrying a fair balance. (5) The usury law prevents charging a fair rate on the loan. (6) The bank is obligated to lend to its depositors first. (7) The borrower should contribute the reserve against the deposits created by his loan.

181. Loans by Central Reserve City Banks upon Farm Land

Mr. Oddie introduced a bill in the United States Senate on February 5, 1923 to amend the Federal Reserve Act as follows:

A Bill to amend section 24 of the Federal Reserve Act.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That paragraph 1 of section 24 of the Act approved December 23, 1913, known as the Federal Reserve Act, be, and the same hereby is, amended to read as follows:

"Any national banking association not situated in a central reserve city may make loans secured by improved and unemcumbered farm land situated within its Federal reserve district, but no such loan shall be made for a longer time than five years nor for an amount exceeding 50 per centum of the actual value of the property offered as security. Any such bank may make such loans in an aggregate sum equal to 25 per centum of its capital and surplus or to one-half of its time deposits and such banks may continue hereafter as heretofore to receive time deposits and to pay interest on the same."—[67th Congress, 4th Session, 1923, S. 4510.]

(a) When were national banks outside the central reserve cities permitted to lend on farm lands? (b) Why was this privilege not granted to national banks located in central reserve cities? (c) Are national banks located in central reserve cities allowed to make this type

of loan at the present time? (d) Give reasons why you consider five years too long a time for these loans. If you disagree with the five-year period state your reasons and conclusions.

182. Loans to Officers and Directors

. . . . of the 370 national bank failures since the organization of the system 5 were attributable exclusively to excessive loans to officers and directors; 22 to excessive loans to officers and directors and depreciation of securities; 8 to excessive loans to officers and directors and investments in real estate; 15 to excessive loans to officers and directors and fraudulent management, and depreciation of securities; and 12 to excessive loans to officers, directors, and others, and fraudulent management. In other words, 62 failures, or practically 17 per cent of the total failures, were due to excessive accommodation to officers and directors and the other causes mentioned.

. . . . on June 29, 1900 . . . . there were 28,709 directors of national banks, of which 18,534 were directly or indirectly indebted to national banks under their management. The aggregate sum owed by these borrowing directors and 2,279 officers and employees who were not directors . . . . amounted to 7.71% . . of the total loans and discounts of the national banks of the country at this time; . . . to 32.55% of the capital stock of the national banks; . . . The capital stock owned in national banks by the 18,534 borrowing directors amounted to $114,759,300. . . . The direct loans of officers and directors amounted to $115,094,157, and their indirect liabilities to $87,193,284.

Recommendations of the Comptrollers of the Currency:

By Mr. Lacey, 1891: "The active officers of a bank be excluded from incurring liabilities to the association with which they are connected, and that the direct and indirect liabilities of a director be confined to 20 per cent of the paid-up capital."

By Mr. Hepburn, 1892: "That the law be so amended as to prohibit officers or employees of a bank from borrowing its funds in any manner, except upon application to and approval by the board of directors."

By Mr. Eckels, 1893: "That no executive officer of a bank or employee thereof be permitted to borrow funds of such bank in any manner, except upon application to and approval by the board of directors."—[Report of Comptroller of the Currency, 1900, pp. XIV-XVI.]

(a) What is the objection to prohibiting directors and officers of a bank from borrowing directly or indirectly from the bank? (b) Is the danger greater where the director is also an officer of the bank? (c) Should the borrowing director be allowed to be present at the meeting of the directors which passes upon his application for a loan? Should a very high majority of the directors be necessary for approval of such loans? Should written record be kept of the application and approval of such loans? (d) Should the violation of the restriction on loans to officers and directors be made criminal, subjecting the offender to imprisonment, or should the punishment be simply fines imposed upon him or the bank, or both? (e) Should the banks be

required to report to the Comptroller the loans made to directors and officers, at the time of each call? (f) At the date of the above Comptroller's report, did the directors and officers of the national banks contribute any net capital to the banks? Is this a reasonable situation? (g) What is the present restriction as to loans by national banks to their directors and officers?

183. Distribution of Assets and Liabilities of National Banks

Items	1904 %	1905 %	1906 %	1907 %	1908 %	1909 %	1910 %	1911 %	1912 %	1913 %
Loans and discounts	53.4	53.9	54.0	56.1	52.9	53.5	55.6	54.5	55.1	56.9
United States bonds	7.9	7.4	7.8	7.9	7.9	7.6	7.5	7.4	7.1	7.3
Lawful money	7.2	8.9	7.8	8.4	9.6	9.5	8.9	8.6	8.1	8.3
Total	68.5	70.2	69.6	72.4	70.5	70.6	72.0	70.5	70.3	72.5
Capital	11.0	10.7	10.4	10.7	10.2	9.8	10.2	9.9	9.4	9.7
Surplus and profits	9.8	8.3	8.4	8.8	8.5	8.4	8.9	8.7	8.7	9.1
Individual deposits	49.6	51.1	52.4	51.5	50.4	52.3	52.4	52.9	53.8	53.0
Total	70.4	70.0	71.2	70.9	69.1	70.5	71.5	71.5	71.9	71.8

[Report of Comptroller of the Currency, 1913, p. 16.]

(a) What is the significance of the constancy of the above percentages? (b) Is there any significance in the practical equality of the two totals? (c) Prepare similar data for the period 1914 to 1924, and observe how the war and post-war events affected the percentages, and discover the causes of the changes. (d) Which factors would the establishment of the federal reserve system affect particularly?

184. Classification of Loans

On October 1, 1880, the loans of the New York City national banks were distributed as follows:

On endorsed paper	$107,058,860
On single-name paper	27,755,152
On U. S. bonds on demand	3,915,077
On other stock, etc., on demand	92,630,982
On real estate security	1,336,513
All other loans	5,731,917
	$238,428,501

(a) Compute the percentage each type of loan constituted of the whole at this date. From the latest report of the Comptroller of the Currency compute the similar distribution, and note the significant changes in business practice evident in the past 45 years.

185. Self-Liquidating Loans

(a) Are self-liquidating commercial loans based on specific completed or intended business transactions? (b) Will commercial paper growing out of actual exchanges of goods assuredly be covered by an equivalent value? (c) How do the courts regard a transaction in which A got B to accept a draft on B, which by its terms purports to be based upon a sale of goods by A to B, whereas the sale never took place? If such a trade acceptance is discounted with C innocent of the exact nature of the transaction between A and B, and B fails to pay, what course would C pursue? (d) Can the lender compel the borrower to use the proceeds of the sale of the goods which the loan was granted to finance, to be used to liquidate the loan? (e) If a single-name promissory note covering a purchase of public utility bonds is pledged to secure a loan of money to finance the cold storage of eggs for three months, is the transaction self-liquidating? (f) Is a loan procured to carry bonds on a margin a self-liquidating loan?

186. Legality and Wisdom of Overdrafts

A usage to allow customers to overdraw and to have their checks and notes charged up without present funds in the bank—stripped of all technical disguise—the usage and practice thus attempted to be sanctioned—is a usage and practice to misapply the funds of the bank, and to connive at the withdrawal of the same, without any security, in favor of certain privileged persons. Such a usage and practice is surely a manifest departure from the duty, both of the directors and cashier, and cannot receive any countenance in a court of justice. It could not be supported by any vote of the directors, however formal; and, therefore, whenever done by the cashier, is at his own peril and upon the responsibility of himself and his sureties. It is anything but "well and truly executing his duties as cashier."—[U. S. Supreme Court, I Peters, p. 71.]

(a) Does the National Bank Act allow a cashier to grant an overdraft, or does it make it specifically illegal, or is it silent on the matter? (b) What is the state law on the matter? (c) Suppose the drawer pledges collateral in advance with the bank to protect expected overdrafts: is an overdraft under such conditions equally illegal, or unwise, or done at the peril of the cashier? (d) What is the fundamental difference between the operations whereby a bank accepts a time or demand draft drawn on it by a drawer who does not have an account at the bank, and whereby it allows an overdraft by one of its regular depositors? why is the one regarded good banking and the other not?

187. Discounting a Promissory Note

(a) A 4 months' note dated at New Haven, April 15, for $300 and bearing interest at 4% from date was discounted at the First National Bank, May 30, at 6%. The seller of the note asked for a cashier's check for half the proceeds and a certificate of deposit for the rest. Calculate the proceeds and write the note, the check, and the certificate of deposit. (b) A note dated May 13, 1922, payable in 4 months, without interest, was discounted May 31, 1922, at 8%. If the proceeds of the note were $220.83, what was the face of the note? (c) A person owes $2,500. For what amount must he draw his note at 90 days without interest, so that when discounted at 6% the proceeds will cancel the debt?

188. Collateral Securities

The following statements refer to actual decisions handed down regarding the rights of national banks in taking collateral against loans. Study each case carefully to determine whether the bank may legally carry through such a transaction.

1. A national banking association may take as collateral security for a loan, a warehouse receipt for merchandise.

2. A national bank received from a customer bonds as collateral security for a debt then existing and for future obligations. Afterwards, and after the customer had paid his indebtedness, the bonds were stolen from the bank. Determine liability of the bank.

3. "B" had overdrawn his account at national bank "A" in the amount of $500. His note for $500 was sent to be discounted to cover the overdraft. Bank "A" refused to discount the note, but held it as security for the overdraft. "B" claimed "A" had no legal right to his note on that condition.

4. A bank has in its possession securities valued at $5,000 which are sent to it for a particular purpose. The sender owed the bank $5,000. Can the bank hold the securities as collateral against the indebtedness? Why?

5. A company indebted to a national bank on a note, and to the president and cashier of the bank on endorsement made for it, turned over to such officers its property to be sold, and the proceeds applied to the indebtedness to the bank. The surplus, if any, to be paid to the company. Can the officers apply the surplus, if any, to loans due them?

6. Creditors holding collateral security are not liable for negligence in realizing thereon.

(a) State which statements are correct from a legal point of view.

(b) What are the rights of the different parties in "4" and "5"? (c) What is the difference, if any, between a national bank and a national banking association?

189. Security for Farmers' Personal and Collateral Loans

For the country as a whole, 36% of farmers' short-time loans from banks reporting on this subject had no security other than the written promise of the debtor to pay at the proper time. In Iowa 66.3% of the personal and collateral loans were of this nature. In other States, loans secured by the indorsement of one or more persons are the prevailing type.

Combining the figures of the first two columns of the following table, it will be observed that in the United States, 68% of these loans were strictly personal or character loans. The lowest total occurs for Oklahoma, where 30% of the loans rest on personal security only.

Considering the kind of collateral pledged, mortgages on live stock are of most importance, 18.3% of the total personal and collateral loans to farmers in the United States being based on this form of security.

	Total No. of Banks Reporting	Per Cent of Loans Secured by						
		Note Without Indorsement	Note With One or More Indorsements	Mortgage on Live-stock	Crop Lien	Warehouse Receipt	Stocks and Bonds	Other Ways
United States	7,590	36.0	32.0	18.3	6.2	1.4	4.2	1.9
New England	160	15.7	62.6	1.7	....	.3	18.1	1.6
Middle Atlantic	519	19.8	67.6	1.0	....	.2	9.1	2.3
East No. Central	1,498	46.8	43.9	3.3	.3	.1	4.7	.9
West No. Central	2,713	47.6	17.3	25.0	5.7	.6	1.8	2.0
South Atlantic	644	11.4	57.6	9.2	7.3	5.8	5.8	2.9
East So. Central	458	15.9	45.9	14.1	10.4	4.0	6.4	3.3
West So. Central	719	18.5	20.9	38.6	17.7	1.5	1.7	1.1
Mountain	489	27.9	12.2	39.6	12.1	1.4	3.5	3.3
Pacific	390	49.0	13.2	15.0	8.3	4.5	7.8	2.2

[Valgren and Engelbert, Bank Loans to Farmers on Personal and Collateral Security, U. S. Dept. of Agriculture, Bulletin No. 1048, pp. 20-21, Washington, D. C., 1922.]

(a) What do you understand by personal credit? Can it be secured? (b) How do you explain variation of the wide regional collateral requirements? For example, in South Atlantic the notes without indorsement make up only 11.4% whereas in the Pacific States (California, Washington, and Oregon) it comprises 49%. (c) In what class of loans (marketing, production, or consumptive) are the warehouse receipts best adapted for use as collateral? (d) Where would you expect to find stocks and bonds used most extensively? Why? How does your judgment differ, if at all, from the foregoing

table? (e) Make any general conclusions which you may be able to do.

190. Loans by a National Bank Secured by Its Own Stock

No association shall make any loan or discount on the security of the shares of its own capital stock, nor be the purchaser or holder of any such shares, unless such security or purchase shall be necessary to prevent loss upon a debt previously contracted in good faith; and stock so purchased or acquired shall, within six months from time of its purchase, be sold or disposed of at public or private sale; or in default thereof, a receiver may be appointed to close up the business of the association according to section 5234.—[Rev. Stat. U. S., sec. 5201.]

(a) Is it possible for a person to subscribe for shares of stock of a national bank, pay part cash, and give his note for the remainder and pledge the shares for security? What is a "stock note"? Why is this type of finance regarded as undesirable for banks? (b) Who may urge that a transaction is not valid because it violates this provision against purchase by the bank of its own stock? Is there any penalty attached to violation? (c) Does this law forbid a national bank to loan upon the security of the stock of another national bank? Does it forbid a bank to buy the stock of another bank? (d) What is the reason for forbidding a national bank to buy and own some of its own stock? What is meant by "treasury stock"?

191. Warehouse Receipts as Bank Collateral

On September 15, 1926, John Brown stored 250 bushels of wheat in the Minneapolis Grain Warehouse Company receiving a warehouse receipt which specified that this wheat should be delivered to the lawful holder of this warehouse receipt upon return of the receipt properly indorsed. The Minneapolis Grain Warehouse shipped the grain through error to Chicago Grain Company in Chicago via the C. & N. C. Railroad. Before the grain was delivered to the Chicago Grain Company, John Brown returned the receipt and demanded his wheat. He was then informed that the wheat had been shipped through mistake to Chicago Grain Company, and by that time the wheat was in the hands of the C. & N. C. Railroad in Chicago. The Chicago Grain Company had been notified that they should not receive the grain inasmuch as the Minneapolis Warehouse Company could not pass legal title. John Brown demanded, therefore, that the wheat should be returned to him.

(a) What rights have the parties in this transaction? (b) Can the C. & N. C. Railroad Company hold the grain for transportation charges?

192. Advantage of Cash Discount and Time Sales Terms

A has $5,600 worth of merchandise that he can sell for that amount on a 60-day credit basis or for cash on a 2½% discount basis. If he sells on credit he will have to borrow $4,450 at 4½% from the bank to meet his accounts due. If he sells for cash he will have to pay the $4,450 on his accounts but can make 10% on the balance during the next 60 days.

(a) What is the more profitable course for A to follow? Show how your results are obtained.

193. Distribution of Securities Held by Banks of New York City

By national banks on August 15, 1914; by state banks and trust companies on October 31, 1914, dates just previous to the establishment of the federal reserve system.

(000 omitted)

	Securities whose market value is 100% or above	Less than 100%	Total
United States Government bonds	$ 194	$ 323	$ 517
Bonds of insular possessions	78	25	103
Bonds of foreign countries and cities	743	2,041	2,784
State and municipal bonds (U. S.)	33,477	13,879	47,356
Railroad bonds	30,096	146,928	177,024
Railroad short-term bonds	7,015	14,168	21,183
Industrial and miscellaneous bonds	31,863	77,941	109,804
Industrial and short-term miscellaneous notes	9,046	7,784	16,830
Railroad stocks	125,042	148,813	273,855
Oil company stocks	27,320	2,372	29,692
Mining company stock	15,341	20,406	35,747
Other industrial and miscellaneous stocks	235,461	200,622	436,083
	$515,676	$635,302	$1,150,978

[Report of Comptroller of the Currency, 1914, p. 10.]

(a) What was meant by "all-rail" and "industrial" and "mixed collateral" loans? In mixed collateral loans what proportion was usually required by Wall Street banks between the amounts of rails and industrials pledged? How has that ratio been changed in recent years? Why? Upon which type of loans were the lowest margins required? (b) Did the banks prefer to lend on shares above or below par? Why? (c) Did the banks lend on unlisted stocks and bonds? (d) What was the source of the funds loaned on stock exchange collateral by the Wall Street banks? (e) What factors determined the above distribution of securities upon which loans were made?

194. Effect of Restrictions on Real Estate Loans on National Banks

Of all the numerous suggestions made to the office of the Comptroller for revision of the national banking laws, on none has there been greater unanimity than on the suggestion for liberalizing the lending powers of national banks upon the security of real estate. From every section of the country, especially from banks located outside of the large cities, there is an insistent demand for the removal of the handicaps which the existing laws impose in this connection.

Section 24 prohibits a national bank from lending money upon first mortgage security upon city property for a longer period than one year and further limits the aggregate amount of such loans to a sum not in excess of one-third of the time deposits. The State banks and trust companies in active competition have no such limitations imposed upon them. A first mortgage upon improved city property is considered a very fine form of security. But real estate loans are ordinarily made for a longer period than one year. If a national bank is prohibited from meeting the needs of its customers in this connection, the customer naturally will go to the State bank to borrow the money upon his real estate, and the State banks as a result will get his account and in many cases his entire commercial business. This is one of the severest forms of competition which the national banks outside of the large banking centers face today and it accounts in a large measure for the rapid growth of the trust companies in those localities and for the relative reduction of the resources of national banks.—[Report of the Comptroller of the Currency, 1924, p. 11.]

(a) Justify the restrictions on real estate loans imposed upon national banks. (b) Advance reasons why it may be safe for a trust company to loan on real estate with greater liberality than for a national bank. (c) Does the record of bank failures indicate that the restrictions are wise? (d) Is the purchase of real estate mortgage bonds by national banks warrantable but direct loans on real estate not warrantable?

195. Legal Restrictions on Bank Loans

THE CRESCENT CITY NATIONAL BANK OF NEW ORLEANS
September 15, 1926

ASSETS		LIABILITIES	
Cash	$ 500,000	Capital	$1,000,000
Exchanges for the clearing house	250,000	Surplus	250,000
Due from Federal Reserve Bank	500,000	Deposits: Time	1,000,000
Bonds	750,000	Demand	3,000,000
Loans and discounts	3,500,000	Notes	250,000
Total	$5,500,000		$5,500,000

(a) What amount could this bank lend to one borrower on: (1) Borrower's unsecured single-name note? (2) Borrower's note se-

cured by Liberty bonds? (3) Borrower's note secured by warehouse receipts? Show how the amount of loans increases with an increase of security. (4) Bankers' acceptances (commercial paper)?

(b) What would be the total amount which this bank could lend on: (1) Farm lands as security? (2) Urban real estate?

(c) What is the maximum amount of bills that this bank might accept legally on: (1) Acceptances arising out of domestic transactions? (2) Acceptances arising out of foreign trade transactions? (3) Acceptances arising out of the creation of dollar exchange?

196. Legal Restrictions on Real Estate Loans

THE KANSAS CITY NATIONAL BANK

September 15, 1926

ASSETS		LIABILITIES	
Cash	$ 600,000	Capital	$1,200,000
Exchange for clearing	300,000	Surplus	300,000
Due from Fed. Res. Bank	600,000	Deposits:	
Bonds	900,000	Time	1,200,000
Loans and discounts	4,200,000	Demand	3,600,000
		Notes	300,000
Total	$6,600,000	Total	$6,600,000

(a) Which of the following loans could this bank legally grant? Why? (1) A loan of $6,000 to H. C. Smith of St. Louis, Mo., secured by city real estate which was located in St. Louis and valued at $25,000. (2) A loan of $7,500 to H. P. Green of Denver, Colo., secured by city real estate located in Denver and valued at $20,000. (3) A loan of $6,000 to John Smith of Kansas City secured by a mortgage on real estate in Kansas City. The real estate was appraised and valued at $9,900. (4) A loan of $5,000 to Tom Johnson of Kansas City secured by a second mortgage on real estate located in Kansas City. The appraised value of the city real estate was $120,000 and the first mortgage was for $40,000. (5) A loan of $6,000 to John Smith. The note was dated June 15, 1923 and was due January 1, 1925. The collateral offered was a first mortgage on real estate located in Kansas City and valued at $15,000. (6) A loan to a farmer who lived within six miles of Kansas City for $2,000, dated June 15, 1923 and payable on June 15, 1925. The loan was secured by farm lands valued at $10,000. (7) A loan to a farmer who lived within ten miles of Kansas City for $12,000, dated June 15, 1923 and payable June 15, 1928. The loan was secured by farm land valued at $20,000.

197. Legal Rights of Parties to Loans in Excess of Section 5200 National Bank Act

1. Section 5200, Revised Statutes, which provides that the total liabilities to any association or any person, etc., shall not exceed one-tenth part of the capital stock paid in, was intended only for the guidance of the association.

2. Loans by a national bank to an individual or company in excess of one-tenth of its paid-up capital are void.

3. The cashier of a national bank without the knowledge and against the orders of the other officers, discounted for the maker notes far in excess of the amounts which the bank could legally loan to one person, and beyond the ability of the maker or indorser of such notes to pay.

4. The lending by a national bank to an individual of more than the national banking law allows, cannot be taken advantage of either by the debtor or another creditor of his.

5. An indebtedness which a national bank incurs in the exercise of any of its authorized powers, and for which it has received and retains the consideration, is void from the fact that the amount of the debt surpasses the limit prescribed by Revised Statutes of the United States, section 5202, or even incurred in violation of the positive prohibition of the law in that regard.

6. John Smith borrowed $5,000 from National Bank X. He stated to the president at the time that he had 100 shares of Bank X stock valued at $12,000 which would be security against his loan. He did not turn over the certificate to the bank. Later it was ascertained that Bank Y held the stock as collateral against a loan of $10,000.

(a) In each case above criticize the statement explaining why each is correct or not as the case may be. (b) Outline briefly the rights and liabilities of the parties involved in each case. (c) What changes, if any, would be made in each case as a result of the McFadden-Pepper Act, amending section 5200?

198. Study of Section 5200 of the Revised Statutes

The national banks were limited by section 5200 of the Revised Statutes of the United States as regards the total amount that the individual bank could lend to the individual borrower. This principle involved in this section is to be found in one form or another in the state banking laws. Many bankers and business men have felt for some time that section 5200 was not clear and furthermore should be radically revised. When the so-called McFadden bill was presented in Congress, section 5200 received its due share of attention. Effort was made to enlarge and clarify its provision. No doubt many will

contend that the changes did not accomplish the desired results. Be that as it may, our chief interest lies in the questions: (1) What changes were made? (2) What will be the results of such changes? Of course, we cannot at this early date (July, 1927) answer the last question. We can, however, make a careful comparison between the old and new provisions. This should enable us to determine the fundamental changes and from these we should be able to see what the results are likely to be, in part, at least. The student is referred to section 10 of the Pepper-McFadden Act for the new provisions. For the old he should consult the Federal Reserve Act and the National Bank Act. From these two sources he should be able to answer the following questions (or others raised by himself or his associates.)

(a) Are the limitations on loans to the individual borrowers lower or higher in the McFadden-Pepper Act than under the older Act? (b) Prepare a summary table showing the restrictions for each type of loan. (c) Do you, on the whole, regard the changes as wise or not? Do you regard the provisions in the new act clearer and more easily applied than in the older act? (d) What would be the maximum amount under each act that one borrower could legally secure if the bank had a capital and surplus of $5,000,000?

199. Pepper-McFadden Act and Real Estate Loans

The purpose of this problem is to make a comparison between section 24 of the Federal Reserve Act before the Pepper-McFadden amendment with section 16 of the new act. The new act has liberalized in a very striking way the provisions regarding real estate loans for national banks. The feeling is very strong among certain classes that such changes offer opportunities for unwarranted expansion of real estate loans and the filling up of national banks with unliquid paper. With these points in mind it is desirable to bring the two sections together and make a searching examination of them. They are presented herewith.

Section 16 of new act:

Sec. 16. That section 24 of the Federal Reserve act be amended to read as follows:

"Sec. 24. Any national banking association may make loans secured by first lien upon improved real estate, including improved farm land, situated within its Federal reserve district or within a radius of one hundred miles of the place in which such bank is located, irrespective of district lines. A loan secured by real estate within the meaning of this section shall be in the form of an obligation or obligations secured by mortgage, trust deed, or other such instrument upon real estate, when the entire amount of such obligation or obligations is made or is sold to such asso-

ciation. The amount of any such loan shall not exceed 50 per centum of the actual value of the real estate offered for security, but no such loan upon such security shall be made for a longer term than five years. Any such bank may make such loans in an aggregate sum including in such aggregate any such loans on which it is liable as indorser or guarantor or otherwise equal to 25 per centum of the amount of the capital stock of such association actually paid in and unimpaired and 25 per centum of its unimpaired surplus fund, or to one-half of its savings deposits, at the election of the association, subject to the general limitation contained in section 5200 of the Revised Statutes of the United States. Such banks may continue hereafter as heretofore to receive time and savings deposits and to pay interest on the same, but the rate of interest which such banks may pay upon such time deposits or upon savings or other deposits shall not exceed the maximum rate authorized by law to be paid upon such deposits by state banks or trust companies organized under the laws of the state wherein such national banking association is located."

Section 24 of the Federal Reserve Act, as amended by act approved September 7, 1916 (39 Stat., 752, chap. 461).

Sec. 24. Any national banking association not situated in a central reserve city may make loans secured by improved and unencumbered farm land situated within its Federal reserve district or within a radius of one hundred miles of the place in which such bank is located, irrespective of district lines, and may also make loans secured by improved and unencumbered real estate located within one hundred miles of the place in which such bank is located, irrespective of district lines; but no loan made upon the security of such farm land shall be made for a longer time than five years, and no loan made upon the security of such real estate as distinguished from farm land shall be made for a longer time than one year nor shall the amount of any such loan, whether upon such farm land or upon such real estate, exceed fifty per centum of the actual value of the property offered as security. Any such bank may make such loans, whether secured by such farm land or such real estate, in an aggregate sum equal to twenty-five per centum of its capital and surplus or to one-third of its time deposits and such banks may continue hereafter as heretofore to receive time deposits and to pay interest on the same.

The Federal Reserve Board shall have power from time to time to add to the list of cities in which national banks shall not be permitted to make loans secured upon real estate in the manner described in this section.

(a) Prepare a summary table showing the maximum limits under each. (b) Does the new act make possible any great expansion? If so, what, if any, are the dangers? (c) Will an increase in real estate loans tend to make the bank loans less liquid? Why? (d) What, if any, are the relations of real estate loans to the volume of time deposits under the new law? Is this a desirable thing? Explain fully.

200. When Has a Bank Reached Its Limit in Granting Loans?

When a bank has reached the point where it can not make additional loans without dangerously decreasing the ratio of capital to loans and dis-

counts, or of capital to deposits—that is, without reducing the margin of safety to its depositors below the safety point—the remedy is not in increasing its borrowings from the Federal reserve banks, or from other banks, for the benefit of its customers, but in increasing its capital, and hence the margin of safety, which will justify an increase in deposits, loans, and discounts. The real limit of the member bank's ability to accommodate its customers is not the amount which it can borrow from the Federal reserve bank but the amount which it can borrow from the Federal reserve bank and lend to its customers without endangering the funds of its depositors. This, in its turn, depends upon the relation of the bank's capital and surplus to its deposits.—[Report Joint Commission of Agricultural Inquiry, Part II, p. 87, Washington, D. C., 1921.]

(a) What are the factors which determine the extent to which banks may extend loans? (b) Do you agree with this quotation as regards borrowings from federal reserve? (c) Does the total capital and surplus determine the extent to which loans may be safely made?

201. Limitation on Loans to One Borrower

On September 20, 1898, the date of the last call by the Comptroller for statements of condition of national banks, 1,124 banks, constituting nearly one-third of the entire number of banks in the system, reported loans in excess of the limit allowed by section 5200, Revised Statutes of the United States.

"Sec. 5200. The total liabilities to any association of any person, or of any company, corporation, or firm, for money borrowed, including in the liabilities of a company or firm the liabilities of the several members thereof, shall at no time exceed one-tenth part of the amount of the capital stock of such association actually paid in. But the discount of bills of exchange drawn in good faith against actually existing values, and the discount of commercial or business paper actually owned by the person negotiating the same, shall not be considered as money borrowed."—[Report of the Comptroller of the Currency, 1897, pp. XXX-XXXI.]

(a) Is this type of limitation on loans wise? (b) Why was the law not enforced? (c) How has the law been changed, and with what effect as to its enforcement? (d) Would the following be a satisfactory amendment to the above section, adding after the words "actually paid in":

Provided, That the restriction of this section as to the amount of total liabilities to any association, of any person, or of any company, corporation, or firm for money borrowed, shall not apply where a loan in excess of one-tenth part of the capital stock shall be less than 2 per cent of the total assets of said bank at the time of making said loan. Said loan shall at all times be protected by collateral security equal to or greater in value than the excess in the amount of said loan over one-tenth of the capital stock.—[Together with strict penalties for infractions of the amended section.]

202. Limitations on Loans to a Bank's Officers

The following provisions were once suggested for restricting the loans of a bank to its directors and officers:

1. Exclusion of the active officers of a bank from incurring liabilities to the bank with which they are associated.
2. To confine the direct and indirect liabilities of a director to 20% of the paid-up capital, leaving the 10% limitation of section 5200, U. S. Rev. Stat., intact.
3. Publication of the liabilities of officers and directors.
4. Provision of a suitable penalty for violations of section 5200, something less than forfeiture of franchise.

(a) What is the present law on these points? (b) Give the reasons for the above restrictions; the objections to them.

203. Security for Mercantile Loan

An honest, industrious and healthy young man, who was reared and always worked on his father's farm, which was a good one, realized at the age of 40 that he was unable to make a "living" for his wife and two children and pay his father a proper return for the use of the farm. He concluded that he had better quit farming and move into "town" and take a job with a salary. This he did. And for two years held positions with varying success.

He then concluded to go into *business* for himself. His wife took the last of her inheritance, $3,000, and bought the goodwill and fixtures of a retail meat business in a prominent part of the town for him to try something new.

As he did not have the necessary money to buy a stock and start the business, he made application to the Swedesboro National Bank for a loan of $1,250, and the only security that he could offer was a chattel mortgage on the fixtures.

(a) Under the above conditions, would the officers of the Swedesboro National Bank be justified in making such a loan?

CHAPTER VIII

CREDIT ANALYSIS

204. Organization Charts of Credit Departments

The following charts are presented to show how certain credit departments have been organized to carry on the work assigned them.

Chart 1

Credit Department—National Bank

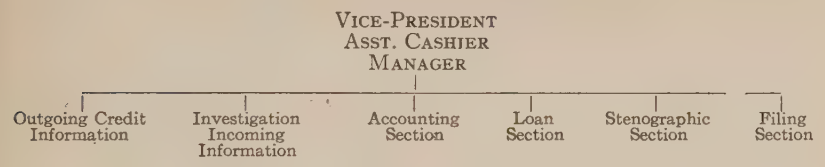


Chart 2

Credit Department—Trust Company

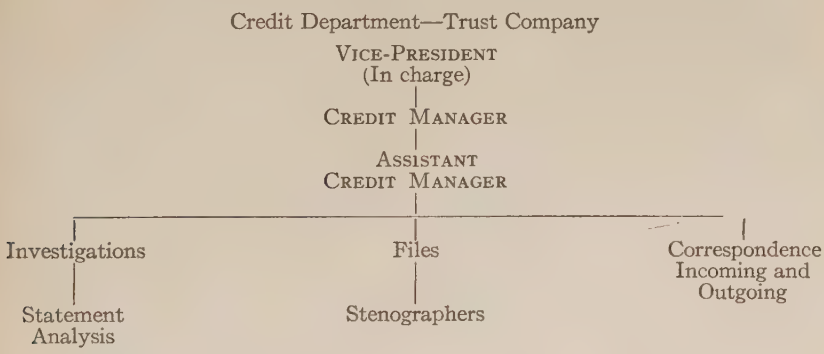


Chart 3

Credit Department—National Bank

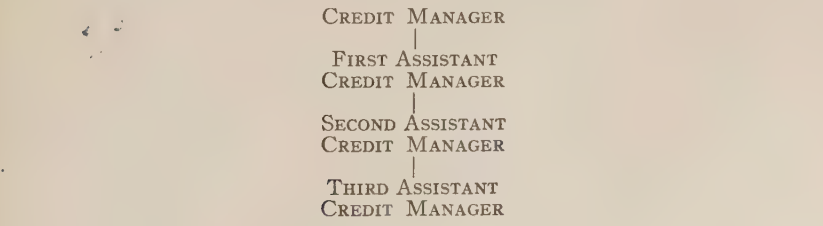


Chart 4

Credit Department—National Bank

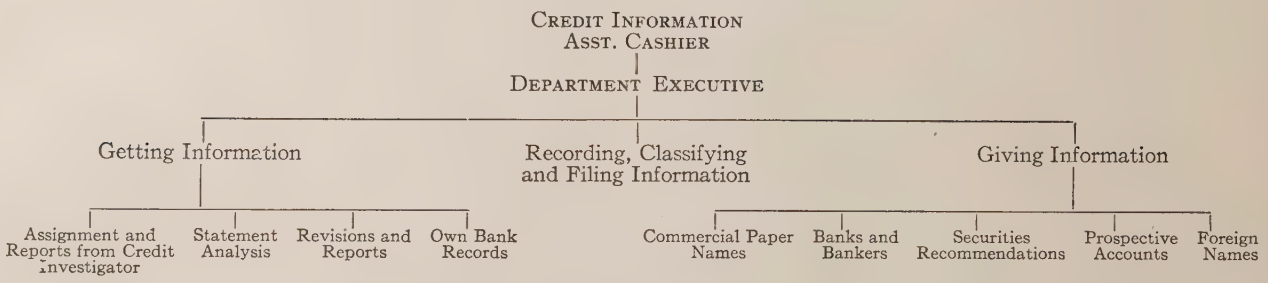
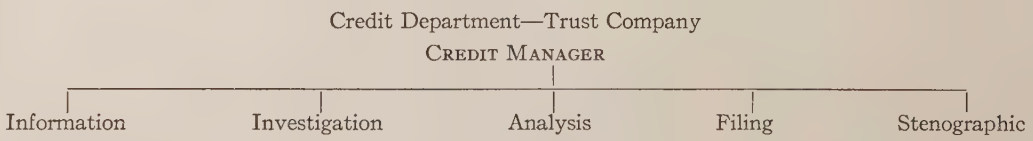


Chart 5

Credit Department—Trust Company



(a) Are there any fundamental differences in the organization of these different banks as shown by the various charts presented? (b) Compare the size and function of the credit department in a country bank with that of a large city bank. (c) Upon what does the extent to which the work in a credit department will become specialized depend? Why? (d) Suggest reasons why the chief of the credit department should rank high in the bank's official list.

205. Sources of Credit Information

(a) What credit services are given by the following? (1) R. G. Dun & Co. (2) The Bradstreet Company. (3) The National Credit Office. (4) New York Credit Men's Association—Interchange Bureau. (5) National Association of Credit Men—Foreign Credit Interchange Bureau. (6) The Martindale Mercantile Agency. (7) The U. S. Fidelity & Guaranty Co. (8) Corporation Manuals, such as Poor's and Moody's.

(b) What are the function, methods, and record of the Reference Clearance Bureau of the Associated Retail Credit Men of New York City, Inc., 15 West 37th Street? (Good description in Saliers, Accountant's Handbook, p. 905.)

206. Clearing House Bureaus of Credit

A Clearing House Bureau of Credit was first installed and operated by the Clearing House Examiner in Cleveland, Ohio, in 1911. Following the Cleveland Plan, Bureaus have now been installed in many cities, both large and small, and some county bureaus are also in operation.

Such a Bureau is probably the best and cheapest safeguard, for a Community of banks, against the over-extended borrower, that has ever been evolved. The cost in salaries for the operation of such a Bureau, is the salary of just one competent clerk (man or woman) and it can be operated in the smaller cities by the Clearing House Manager, without additional cost.

Many requests for details as to the installation and operation of such a Bureau are being received, and this article is written in response to, or in anticipation of, such requests.

The first step in the installation is to take an inventory of all borrowers in all of the banks associated in the Bureau. This is accomplished by having each bank file with the Manager of the Bureau, as of a specified date, a list of each of its borrowers and accommodation endorsers, by name, address and nature of business or occupation. The amount or nature of the loans is not necessary at this point.

When all the lists are in hand, the Manager then arranges all of the names in one file alphabetically (either a card index or a loose leaf index may be used). When this is accomplished, the file will then contain an alphabetical list of every borrower and endorser in every bank in the Association, and the first inventory is then complete.

For each borrower who borrows only in one bank there will be but one card or entry—these we term Single Name borrowers. For each borrower who borrows in two or more banks, there will appear two or more cards or entries—these we term Duplicated Borrowers. The manager continues the names of the Single Name Borrowers in the single name file, and immediately transfers the Duplicated Borrowers to a duplicated borrowers' file.

In the Cleveland Bureau, all Duplicated Borrowers are reported on by the Examiner at least twice a year. Beginning the first week in January, all names indexed under "A" are investigated and reported; during the second week, all names under "B"; during the third week, all names under

"C", and so on until the entire 26 letters in the alphabet are reported. This makes a total of 26 weeks, which is exactly half the year—and the same operation is repeated during the last half of the year. Further, any Duplicated Borrower is reported on at any time, on the request of any bank from whom he is borrowing. If a Clearing House Examiner is employed, he may report on them at the time of each examination.

This same operation may be extended to cover purchases of investment securities, and also overdraft account or unsatisfactory depositors' accounts. The latter, particularly, is a very valuable feature.—[Coates, Francis, Jr., Clearing House Bureaus of Credit, Proceedings of Clearing House Examiners and Managers Conference, held at Chicago, September 29, 1924, published by American Bankers Association, New York, pp. 51-55.]

(a) Why do you think such a Bureau was organized in Cleveland? (b) Summarize the advantages which a member of a Clearing House Association would derive from such a bureau. (c) Is this an extension of the functions of a clearing house association? (d) Does the above method provide data on borrowers who get loans from one bank in Cleveland and one or more banks in other cities?

207. Analysis of Financial Statement

THE BROADWAY NOTION JOBBING COMPANY

Statement for 6 months period ending September 29, 1926

ASSETS		LIABILITIES	
Cash	$ 4,500	Bills payable	$ 6,000
Receivables	195,000	Accounts payable	132,000
Inventory	49,500	Capital	60,000
Furniture & fixtures	9,000	Surplus	60,000
	$258,000		$258,000

Sales for 6 months period ending Sept. 29, 1926	$150,000
Net profit for 6 months period ending Sept. 29, 1926	5,000

(a) Write a credit analysis of this statement, emphasizing any points of weakness or strength which you may find. (b) Would you recommend, if you were a bank credit manager, that a bank lend its funds on the basis of the showing made by this statement? Explain. (c) Outline the advice either favorable or unfavorable which you would give this firm. (d) On the basis of the above statement what is the rate of profit which the owners are earning on their actual investment? Explain how rate of profit is determined.

208. Analysis of Financial Statement

THE NEW YORK VACUUM CLEANING COMPANY

ASSETS:	March 31 1927	April 30 1927
Cash	$ 29,044	$ 25,242
Bills & accounts rec.	226,285	278,750
Merchandise	102,075	141,200
Total	357,404	445,192
Real estate, mchy., fixtures	114,150	100,307
Other	51,970	42,310
	$523,525	$587,809
LIABILITIES:		
Bills & accounts	$201,855	$239,520
Deposits or reserve for taxes	22,064	26,257
Total	223,919	265,777
Capital	221,000	221,000
Surplus	78,605	101,032
	$523,524	$587,809

NOTE: This company already has two lines of credit for $62,500 each and is applying for a third line of $62,500.

(a) What additional data, if any, would you request? What ratios may be computed from this statement? (b) Compare the two statements. How do you account for the changes which you note, keeping in mind that the second was issued only a month after the first? (c) What reasons can you assign for this company's having given two statements so close together? (d) Write a report justifying or criticising the two lines already extended. (e) What would be your reply for the third line if you were operating a national bank in New York City? Give fundamental reasons for supporting your decision.

209. The Analysis of Financial Statement

THE METROPOLITAN DRY GOODS COMPANY

New York, N. Y., December 31, 1926

ASSETS		LIABILITIES	
Cash	$ 280,000	Bills payable	$ 4,000,000
Receivables	3,800,000	Accounts payable	2,000,000
Government bonds	200,000	Taxes	80,000
Merchandise	5,600,000	Mortgages	480,000
Fixed assets	1,360,000	Reserves	4,000
		Net worth	4,676,000
Total	$11,240,000	Total	$11,240,000

Annual sales $24,000,000

(a) Assume that you are the credit manager of a national bank and this company has applied for a loan. Write a complete report analyzing this statement. (b) How much, if any, do you think this concern is entitled to from the above statement? (c) What financial policy would you recommend for this borrower? (d) What is your opinion regarding the efficiency of their collection department? Explain.

210. Dominion Grocery Company,[1] Richmond, Va.

The financial statement on the following page represents the actual standing of this concern on June 30, 1926.

(a) What is the current ratio of this concern? Of what importance is it? (b) Discuss the cash position of this company. (c) This company submitted this statement to a New York bank with a view to opening a new banking connection in New York City. (1) What reasons, if any, can you give for this plan? (2) What profits could the New York bank expect from such a customer? (d) Summarize your analysis of this company.

211. A Virginia Wholesale Grocery [2]

The Virginia Wholesale Grocery Company is located in a very prosperous and well-known Virginia city. It has been doing a very attractive volume of business. Its situation has become such that it feels the need of an out-of-town banking connection. With this in mind negotiations were entered into with a New York bank. In the investigation of this company the following information was secured and placed in the files of the New York bank.

The balance sheet including contingent liability, profit and loss account, and other interesting facts, was as shown on pages 152-154.

[1] These data show the actual condition of a corporation borrowing in the commercial paper market. The name has been changed for obvious reasons.

[2] These data show the actual condition of a corporation borrowing in the commercial paper market. The name has been changed for obvious reasons.

Statement for Problem 210

STATEMENT

As of June 30, 1926

NAME.....Dominion Grocery Co.....ADDRESS.....Richmond, Va.....

BUSINESS.....Wholesale Grocery.....

The undersigned (called borrower), to procure credit from time to time from the —— National Bank (called Bank); on negotiable paper or otherwise, hereby furnishes the Bank with a full and true financial statement as of this date, knowing that the Bank relies hereon in giving such credit, and in consideration thereof the undersigned agrees: This statement shall be considered continuing as true unless written notice of change is received by the Bank; that written notice of any material change will be given immediately; that proper and accurate books of account will be kept by borrower and upon request all or any thereof will be produced for examination with the right to copy them, by representatives of the Bank; that if borrower fail, become insolvent, commit an act of or file a petition in bankruptcy, make an assignment for benefit of creditors, fail to notify the Bank of any material change, fail to produce, on request, any books called for or to permit an examination thereof, or if a judgment shall be rendered or a petition in bankruptcy filed against borrower, or if a receiver be appointed for borrower or borrower's property, or borrower die, or, being a partnership, be dissolved, or if any statement herein be untrue, then, in any such event the borrower's obligations to the Bank shall become immediately due and payable without notice or demand, and the Bank is given a continuing lien upon all the borrower's funds and deposits, whether collected or not, with the Bank, whether said obligations be due or not, and the Bank may apply said funds or deposits on account of said obligations, and that the borrower will pay all expenses of collection, including attorney's fees, incurred by the Bank for the purpose of enforcing any of the borrower's obligations to the bank.

(Please Answer All Questions and Fill in All Blanks)

ASSETS		LIABILITIES	
Cash on Hand	$ 8,071	Accounts Payable (not due)	$ 726
Cash in Banks	.....	Accounts Payable (past due)	.....
Notes Receivable of customers (not discounted or transferred)	402	Acceptances Payable for Merchandise	.....
Trade Acceptances (not discounted or transferred)	.....	Notes Payable for Merchandise	.....
Notes and Accounts Receivable of Affiliated Companies, Branch Offices, etc.	.....	Notes Payable negotiated to — National Bank	.....
Accounts Receivable of Customers (not due) \ All \	59,876	Notes Payable to other Banks	.....
Accounts Receivable of Customers (past due) / Good /		Notes Payable for Personal Loans	.....
Merchandise:		Accruals, (Interest, Taxes, etc.)	.....
Finished (How Valued) \		Reserve	11,211
Unfinished (How Valued) }	50,050	Reserve for Doubtful Accounts	.....
Raw (How Valued) /		Reserve for Depreciation of Plant and Equipment	.....
Stocks and Bonds (at Market)	.....	Reserve for Depreciation of Merchandise	.....
Investments in Affiliated Companies	.....	Chattel Mortgages (on what given)	.....
Liberty Bonds (at Market) $	.....	Mortgage Debt (due .....)	.....
Less amount owing thereon	.....	Other Liabilities (give details)	.....
		Total Liabilities	11,937
Insurance, Taxes, etc., prepaid	1,056	Capital Stock—Preferred	.....
Horses, Wagons and Autos	.....	Capital Stock—Common	187,800
Machinery and Equipment	7,698	Surplus and Undivided Profits	26,612
Fixtures	.....		
Land and Buildings as per schedule on reverse side	49,595	TOTAL	$226,349
Other Assets (give details)	.....		
Call Loans Available	25,333		
Other Notes and Accounts Receivable	23,325		
Deferred	943		
TOTAL	$226,349		

Balance Sheet for Problem 211

STATEMENT

As of June 30, 1925

NAME ..... ADDRESS .....

BUSINESS .....Wholesale Grocery Co .....

ASSETS		LIABILITIES	
Cash on Hand	$ 4,835.56	Accounts Payable (not due)	$ 17,817.96
Cash in Banks	7,837.56	Accounts Payable (past due)	
Notes Receivable of customers (not discounted or transferred)	10,605.02	Acceptances Payable for Merchandise	
Trade Acceptances (not discounted or transferred)		Notes Payable for Merchandise	
Notes and Accounts Receivable of Affiliated Companies, Branch Offices, etc.		Notes Payable negotiated to — National Bank	
Accounts Receivable of Customers (not due) \ All		Notes Payable to other Banks	
Accounts Receivable of Customers (past due) / Good	158,082.40	Notes Payable for Personal Loans	
Merchandise:		Accruals (Interest, Taxes, etc.)	
Finished (How Valued)		Reserve for Taxes	
Unfinished (How Valued)	213,131.02	Reserve for Doubtful Accounts	
Raw (How Valued)		Reserve for Depreciation of Plant and Equipment	
Stocks and Bonds (at Market)		Reserve for Depreciation of Merchandise	
Investments in Affiliated Companies		Chattel Mortgages (on what given)	
Liberty Bonds (at Market) $		Mortgage Debt (due)	
Less amount owing thereon		Other Liabilities (give details)	
		Total Liabilities	17,817.96
Insurance, Taxes, etc., prepaid	2,179.56	Capital Stock—Preferred	123,200.00
Horses, Wagons and Autos	8,800.00	Capital Stock—Common	269,500.00
Machinery and Equipment		Surplus and Undivided Profits	64,602.86
Fixtures	2,400.00		
Land and Buildings as per schedule on reverse side	65,381.94		
Other Assets (give details)			
Books and Stationery	600.00		
Shop Material	100.00		
Stamps and Stamped Envelopes	67.76		
TOTAL	$475,120.82	TOTAL	$475,120.82

CONTINGENT LIABILITY

Upon Receivables Discounted or Pledged	$4,600.00
Upon Accommodation Paper or Endorsements	
Customers' Accounts Sold and Assigned	
As Guarantor for Others on Notes, Contracts, etc	
For Bonds or Unfinished Contracts	
For Leases	
Other Contingent Liabilities	

COMMITMENT LIABILITY

Contract Price of Goods Purchased, Delivery to be Made During 192	$40,000.00
Present Market Value of Goods Purchased, Delivery to be Made During 192	42,000.00

Condensed Profit and Loss Statement for Year Ending 192

Income		Expenses	
Net Sales	$1,516,421.02	Cost of Material or Merchandise Consumed	$1,353,160.12
From Investments	.....	Actual Expense of Conducting Business, Including Rent, Taxes, Insurance, etc	29,192.42
From Discount on Purchases	4,160.06	Salaries Withdrawn	68,848.86
From Other Sources—Itemize	331.78	Interest on Borrowed Money	.....
Miscellaneous	277.50	Bad Debts Charged Off	5,170.30
.....	.....	Depreciation Charged Off	4,410.50
.....	.....	Net Profits	60,408.16
.....	.....		
TOTAL	$1,521,190.36	TOTAL	$1,521,190.36

RECONCILEMENT OF SURPLUS

Surplus at close of previous year—6/30/24	$54,170.14		
Less Charges Not Applicable to Current Year	$ 7,779.44	$46,390.70	
Add Net Profits		$60,408.16	$106,798.86
Less Dividends {Common ($32,340.00) / Preferred ($9,856.00)}			$ 42,196.00
Surplus at end of period—6/30/25			$ 64,602.86

PLEASE GIVE PARTICULARS AS TO EACH PARCEL OF REAL ESTATE

Description & Location of Property	Title in Name of	Mortgage Held by	Maturity	Cost	Assessed Value	Estimated Value	Mortgages		Equity
							First	Second	
Warehouse	Grocery Co.	None		$56,000	$40,000	$120,000			Full
Garage	"	"		15,321.62	9,000	24,000			Full
TOTALS									

Up to what date are taxes paid? Feb. 1, 1925.
Is the interest on all of the above mortgages paid to last interest date?.....

BANK ACCOUNTS	Amount of Lines Granted or Letters of Credit Issued	Under Discount on Statement Date
.....	.....	.....
.....	.....	.....
.....	.....	.....

REFERENCES

1.	5. .....
2.	6. .....
3.	7. .....
4.	8. .....

Name and Address of other Firms and Corporations, in which we are closely connected and Bank where accounts are maintained.

.....	.....
.....	.....
.....	.....

Worth of respective officers or endorsers exclusive of their interests in this business. Approx. $170,000.00.
Insurance on lives of officers payable to the business $.....
Insurance on merchandise.....$195,000.00. Burglary.....None.
On what terms do you sell? Give full particulars. 2%—10 days. Net 30.
During last fiscal year total current liabilities were at a maximum ($80,000.00) on.....and at a minimum ($5,000.00) on stock.

We hereby certify that the foregoing figures are taken from the books of this Company and that they and the statement contained are true and give a correct showing of the financial condition of the company.

Signed this.....day of.....192..

Name.....
Pres.
By.....Treas.
Sec'y.

I/We have audited the accounts of.....for the period from .....
to.....and certify that in my/our opinion the above Balance Sheet and Statement of Profit and Loss set forth the financial conditions of the individual, firm or company at .....and the results of its operations for the period.

.....
(Certified Public Accountant)

Inquiries from the trade were reported as follows:

We have had this account for about five years. Sell them $6,000 to $8,000 monthly. Highest credit $10,000. Discount 2%—10 days. Account very satisfactory.

This is a very small account with us, sales amounting to only $1,000 monthly. Have been selling them for five or six years. They discount all bills (2%—10 days). Account satisfactory.

Selling this account for past five years, last sale being in May of this year for $16,000. They also have a $12,000 order going through at the present time. They discount all bills. The account is very satisfactory.

(N. C.) Our account is very active and satisfactory, our invoices being discounted promptly.

One Virginia bank with capital and surplus of slightly over a million dollars made this statement:

This company's account with this bank has been most satisfactory and we have never hesitated to lend them within the limits of legal restriction, on request, tho they have never been borrowers from us to exceed $50,000 and they have not been owing us at any time except for seasonal needs. We believe the management both honest and capable. Business has shown healthy growth from year to year.

(a) Would you as a banker think this a desirable account? Why? (b) What would be the maximum line of credit which you would extend them? (c) Would your line be indorsed, secured, or straight unsecured note? Why? (d) Prepare a short concise but thorough statement summarizing the credit rating of this company.

212. Financial Statement of the Western Grocery Corporation —Borrows through Commercial Paper Houses

The data [3] on the following page were collected by a large bank in anticipation of the firm's commercial paper which was being handled by a noted commercial paper house.

(A) The borrower's financial statement: The comparative statements show the exact figures submitted by this concern both to the banks and to the commercial paper house regarding its business at the close of each of these three years.

[3] The data presented in this problem are actual data collected by a New York bank. The name has been changed for obvious reasons.

Statement for Problem 212

Corporation

NAME Western Grocery Corp. BUSINESS Wholesale Grocery

ADDRESS State of Okla.

	12–31–24	12–31–25	12–31–26
Quick Assets	$2,177,334	$2,485,230	$2,611,938
Quick Liabilities	1,015,364	1,273,358	1,275,714
Excess Quick Assets	1,161,970	1,211,872	1,336,224
Ratio	214	195	204
ASSETS			
Cash	115,826	108,480	112,242
Notes Receivable (customers)		12,218	10,532
Accounts Receivable (customers)	547,364	711,374	855,084
Merchandise (finished)	1,513,548	1,653,158	1,634,080
Merchandise (unfinished)			
Merchandise (raw)			
Investments (quoted and salable)			
Municipal Warrants	596		
QUICK ASSETS	2,177,334	2,485,230	2,611,938
Real Estate and Buildings	230,320	410,780	438,518
Machinery and Fixtures	245,366		
Other Notes and Accounts Receivable	16,920		
Investments (other than quick)			
Deferred	21,856	18,472	19,330
Other Assets		23,604	22,854
TOTAL ASSETS	2,691,796	2,938,086	3,092,640
LIABILITIES			
Accounts Payable for Merchandise	73,272	149,806	111,642
Notes Payable for Merchandise			
Notes Payable to Banks and Brokers	880,000	1,060,000	1,090,000
Notes Payable Otherwise			
Accruals	59,360	63,552	74,072
	1,432		
	1,300		
QUICK LIABILITIES	1,015,364	1,273,358	1,275,714
Bonded Debt (when due.....)			
Real Estate Mortgages (when due.....)	188,080		
Reserves			
Capital Stock (Preferred)	321,200	378,600	445,600
Capital Stock (Common)	300,000	300,000	300,000
Surplus	867,152	986,128	1,071,326
TOTAL LIABILITIES	2,691,796	2,938,086	3,092,640
Contingent Liability			
Net Sales	8,112,596	9,154,444	9,474,584
Net Profit	132,178	201,268	177,464
Dividends	59,748	61,584	61,026
Outside Worth of Endorsers			
Accountant			

(B) Bank reports: In making its own credit investigation of this Grocery Corporation the bank wrote several banks who had carried this account or who were in a position to comment upon it intelligently. The following were the comments received from four different banks:

BANK COMMENT

1. We have had the account for several years on a non-borrowing basis. We would be glad to let them have nearly anything that they want, but they inform us that they do not need any additional working capital. They keep a moderate six figure balance and we think very highly of them. Sales are expected to exceed $10,000,000 for the year 1926. Account was checked in August and found to be highly regarded.

2. We have had account since July 1926, and give them a line of credit of $200,000, endorsed by Mr. ...., president. This endorsement is said to add about $1,200,000. They have borrowed from us and keep satisfactory balances. We often buy their notes in the open market for our correspondents.

3. Our directors have authorized us to purchase their paper to our legal limit when we have funds to invest. Their paper is usually endorsed by their directors.

4. This firm has been consistently successful and their growth very great. They have several branches. The president carries $200,000 life insurance payable to company. We regard them highly and their account with us is very satisfactory. For your private use, and without responsibility on the part of this bank or its officers.

(a) Make a careful study of this statement and show, if possible, why this concern is able to borrow in the commercial paper market. (b) What weak spots, if any, do you find in analyzing this statement? (c) Indicate their (1) capital position, (2) collection policy, (3) current position. (d) Study their sales record and ascertain, if possible, if they are doing a sufficient volume of business on their net. Explain your conclusion.

213. Florida Hardware Company [4]

The data on the following page show some leading facts about this wholesale hardware company.

[4] These data show the actual condition of a corporation borrowing in the commercial paper market. The name has been changed for obvious reasons.

Statement for Problem 213

Firm or Individual

NAME Florida Hardware Co. BUSINESS Wholesale Hardware

ADDRESS Florida

	12–31–23	12–31–24	12–31–25	12–31–26
Quick Assets	$1,268,426	$1,327,972	$1,657,032	$2,925,014
Quick Liabilities	509,946	475,960	599,124	1,285,830
Excess Quick Assets	758,480	852,012	1,057,908	1,639,184
Ratio	2.48	2.79	2.79	2.02
ASSETS				
Cash	57,958	68,568	129,788	131,934
Notes Receivable (customers)	133,278	142,898	191,792	279,014
Accounts Receivable (customers)	465,380	478,564	692,952	1,385,796
Merchandise (finished)				1,128,270
Merchandise (unfinished)	611,810	637,942	642,500	
Merchandise (raw)				
Investments (quoted and salable)				
QUICK ASSETS	1,268,426	1,327,972	1,657,032	2,925,014
Real Estate and Buildings				
Machinery and Fixtures	34,014	31,244	39,460	103,302
Other Notes and Accounts Receivable				
Investments (other than quick)	13,940	18,440	21,242	21,240
Deferred	2,434	6,330	6,972	45,582
TOTAL ASSETS	1,318,814	1,383,986	1,724,706	3,095,138
LIABILITIES				
Accounts Payable for Merchandise	66,202	82,960	149,124	357,070
Notes Payable for Merchandise	395,000	393,000	450,000	
Notes Payable to Banks and Brokers				840,000
Notes Payable Otherwise	48,744			
Accruals				
Credit Balance				88,760
QUICK LIABILITIES	509,946	475,960	599,124	1,285,830
Real Estate Mortgages (when due)				
Reserves				
NET WORTH	808,868	908,026	1,125,582	1,809,308
TOTAL LIABILITIES	1,318,814	1,383,986	1,724,706	3,095,138
Contingent Liability				
Net Sales				
Net Profit				
Withdrawals				
Outside Worth of Endorsers or Partners				
Accountant				

The agency report read in part as follows:

PERSONNEL

Since the organization of this business in 1900 it has been managed by the same man. His long experience has enabled him to operate the company successfully and profitably.

BANK AND TRADE COMMENT

The two depositories that have this account accord it liberal lines of accommodation. Our recent investigation indicated that the company was entirely out of debt at banks. The management is well spoken of. Trade obligations are invariably discounted.

We grant this firm our legal limit on their own straight and unsecured paper and our relations have always been entirely satisfactory. At present they are owing us $240,000 in this way. The management is capable and experienced in their line, of excellent character and habits and give close attention to the business. We believe their statement may be relied on as fairly representing their condition.

Borrowings are not frequent in character and balances are satisfactory.

In the trade the company is sold in amounts that range from a few dollars to $15,000 at a time. On terms that vary from 2%—10 net 30 days and 2%—10 net 60 days, full advantage is taken of the discount privilege, while on net terms payments are strictly prompt. No payments are made by note or trade acceptance.

(a) Prepare a report for this company. (b) What are the various sources from which this company can reasonably expect to secure funds? Why?

214. Tennessee Wholesale Dry Goods Company,[5] Nashville, Tennessee

A mercantile agency submitted the following facts concerning the history and management of the company as reported to the agency:

Operations consist of handling a full line of dry goods, notions and furnishings at wholesale. The only office is located at headquarters, Nashville, Tenn. From here the company travels 16 salesmen throughout middle and eastern Tennessee, southwest Kentucky, western North Carolina, northern South Carolina, and a portion of northern Georgia. Sales are made to retail stores on terms of 3/10, 2/60, and 60 days net.

Business was founded in 1900. In 1925 company completed a new 6 story and basement building of mill construction 80 x 145 ft. containing about 70,000 sq. ft. of floor space. The present corporation was chartered under ..... laws in 1909 when the founder retired from active management.

Financial information: Business has been consistently, altho moderately, profitable and comparative statements disclose little variation from year to year. Recent balance sheet indicates a satisfactory liquidating power.

Bank and Trade Comment: Depositories extend individual lines ranging up to $200,000 on the usual endorsement. Four of the principal stockholders endorse the company's paper adding more than $1,000,000 in out-

[5] These data show the actual condition of the corporation borrowing in the commercial paper market. The name has been changed for obvious reasons.

Statement for Problem 214

Corporation

NAME Tennessee Wholesale Dry Goods Co. BUSINESS Wholesale Dry Goods

ADDRESS Nashville, Tenn.

	12–31–1924	12–31–1925	12–31–1926
Quick Assets	$1,676,882	$1,677,986	$1,582,220
Quick Liabilities	738,000	810,000	724,030
Excess Quick Assets	938,882	867,986	858,190
Ratio	2.27	2.07	2.18
ASSETS			
Cash	51,968	28,830	75,540
Notes Receivable (customers)			101,702
Accounts Receivable (customers)	849,868	838,924	739,796
Merchandise (finished) Merchandise (unfinished) Merchandise (raw)	775,046	810,232	665,182
Investments (quoted and salable)			
QUICK ASSETS	1,676,882	1,677,986	1,582,220
Real Estate and Buildings	203,308	376,636	376,636
Machinery and Fixtures			
Other Notes and Accounts Receivable			
Investments (other than quick)			
Miscellaneous		8,894	10,058
TOTAL ASSETS	1,880,190	2,063,516	1,968,914
LIABILITIES			
Accounts Payable for Merchandise	738,000	795,000	710,030
Notes Payable for Merchandise			
Notes Payable to Banks and Brokers			
Notes Payable Otherwise			
Current Mortgage		15,000	15,000
QUICK LIABILITIES	738,000	810,000	725,030
Bonded Debt (when due.....)			
Real Estate Mortgages (when due.....)		135,000	120,000
Reserves			
Capital Stock (Preferred)	500,000	500,000	500,000
Capital Stock (Common)			
Surplus	642,190	618,516	623,884
TOTAL LIABILITIES	1,880,190	2,063,516	1,968,914
Sales	3,109,432	3,086,866	
Profits	22,856	36,324	
Dividends	45,000	60,000	
Outside Worth of Endorsers			
Accountant			

(Statements unaudited but signed by President.)

side means. Proper use is made of commitments in all quarters and bank comment is favorable.

Analysis

This company's business has shown very little change in the past three years. Operations have been consistently altho moderately profitable. Dividends, however, have been in excess of the profits resulting in a moderate decline in responsibility. Working capital is falling off somewhat faster than net worth as mortgage indebtedness is being reduced each year.

A New York bank made inquiries from two banks which had carried the accounts. The replies were briefly as follows:

Bank Comment

1. We have had this account a number of years and extend them a line of $200,000. Balances maintained are satisfactory. A recent check thru the banks and trade brought satisfactory results. We have at times shown our confidence in their paper by purchasing it for our customers.

2. We have had this account for only a short time. We extend them a line of $200,000 endorsed as their commercial paper; they have never borrowed. Bank and trade reports favorable at a recent check. We consider paper is a good risk.

The firm submitted direct the annual balance sheets for the past three years. They were set up on the comparative statement sheet as shown on the preceding page.

(a) Write a report analyzing these facts, showing any ratios you think desirable. (b) State briefly any recommendations you would make concerning this company.

215. Western Creamery Company,[6] Kansas

A large creamery company had been doing a successful business in a city in Kansas for a number of years. Their banking business had been handled by local banks. The gradual growth of this firm over a period of years brought it to a position in the summer of 1926 where it felt the need of larger banking connections. The management decided that it would be desirable from many points of view to have a connection in New York City. During July and August the problem was discussed with a leading national bank in New York City. The creamery company submitted financial statements for the years ending December 31, 1924 and December 31, 1925. At the close of the year 1926, they promptly filed a financial statement as of

[6] These data show the actual condition of a corporation borrowing in the commercial paper market. The name has been changed for obvious reasons.

Statement for Problem 215

Corporation

NAME Western Creamery Co. BUSINESS Creamery ADDRESS Kansas

	12–31–24	12–31–25	12–31–26
Quick Assets	$ 173,638	$ 263,030	$ 265,060
Quick Liabilities	67,754	68,092	109,258
Excess Quick Assets	105,884	194,938	155,802
Ratio	2.56	3.86	2.42
ASSETS			
Cash	48,718	44,930	68,750
Notes Receivable (customers)	45,826	54,086	57,196
Accounts Receivable (customers)	79,094	104,014	79,114
Merchandise (finished)			
Merchandise (unfinished)			
Merchandise (raw)			
Investments (quoted and salable)		60,000	60,000
QUICK ASSETS	173,638	263,030	265,060
Real Estate and Buildings	636,432	689,206	702,258
Machinery and Fixtures	125,182	136,142	147,056
Other Notes and Accounts Receivable			
Investments (other than quick)	96,200	44,600	57,044
Deferred	3,518	1,664	7,574
TOTAL ASSETS	1,034,970	1,134,642	1,178,992
LIABILITIES			
Accounts Payable for Merchandise	16,620	25,436	25,536
Notes Payable for Merchandise	23,676	24,266	25,708
Notes Payable to Banks and Brokers			
Notes Payable Otherwise	21,082	18,390	58,014
Accruals			
Reserve for Taxes	6,376		
QUICK LIABILITIES	67,754	68,092	109,258
Bonded Debt (when due.....)			300,000
Real Estate Mortgages (when due.....)			
Reserves	266,322	300,798	334,282
Capital Stock (Preferred)	344,400	350,000	22,200
Capital Stock (Common)	250,000	250,000	250,000
Surplus	106,504	165,752	163,252
TOTAL LIABILITIES	1,034,970	1,134,642	1,178,992
Contingent Liability			
Net Sales	3,081,508	3,570,592	3,546,680
Net Profit	64,726	85,620	47,662
Dividends	47,374	50,670	40,730
Outside Worth of Endorsers			
Accountant			

December 31, 1926, with a profit and loss statement attached. In addition they gave a list of trade and bank references.

The New York bank set up the financial statements on the comparative statement sheet as given on the preceding page.

The profit and loss statement and data on surplus for year ending December 31, 1926 were submitted as follows:

Loss and Gain 1926

Creamery Department:			
Trading profit	$84,255.80		
Rent	5,326.00	$ 89,581.80	
Deductions:			
General insurance	9,742.22		
Life insurance	5,169 06		
Taxes	11,143.84		
Depreciation (Bldg. & equip.)	14,169.28		
Depr. (Cans, pkrs. & trucks)	11,196.94		
Donations	1,249.00		
Interest	2,301.20		
Repairs	6,599.34	61,570.88	$28,010.92
Salina Department:			
Trading Dept	45,346.50	45,346.50	
Deductions:			
Depreciation	6,462.86		
Depreciation	5,667.22		
Taxes	2,861.60		
Insurance	1,504.00	16,495.68	28,850.82
Produce Department:			
Gross loss	1,377.98		
Rent	4,640.00		
Interest	3,180.00	9,197.99	9,197.98
			$47,663.76
Net Profit Creamery	28,010.92		
Net Profit Salina	28,850.82	56,861.74	
Less Profit Loss	9,197.98		
Less Dividends	40,731.52	49,929.50	
		$ 6,932.24	

Surplus Account 1926

Balance Dec. 31, 1925	$165,751.70	
Less Income Tax	9,430.46	
	$156,321.24	
To Surplus 1926	6,932.24	
	$163,253.48	

Inquiries were immediately forwarded to the several banks and trade references. A large number replied stating briefly but effectively their estimate of this firm. To quote two trade comments:

We have extended credit up to $10,000. Our experience shows them to be fine people. They meet their obligations promptly. We regard their business ability and integrity highly.

Have dealt with them for two years and find them good people. They do as they agree. Our business with them amounts to about $30,000 to $40,000 per week. We take pleasure in recommending this firm as good, honest and capable business people.

Two banks replied as follows:

Have high opinion of this firm. Give them $30,000 straight note (our limit). In addition we handled from $40,000 to $60,000 on customers' notes secured by warehouse receipts.

High credit. Extend them our limit on open note. Meet obligations promptly.

The New York bank's credit department made the following comments which were filed in the credit folder:

Company is paying 12% dividends per annum on its common stock and has maintained a satisfactory earning record over the past forty years, during only two of which the company has failed to show net profits.

In addition to their line here, the company will enjoy open bank lines totaling approximately $100,000 in six Kansas Banks, who have also rediscounted warehouse receipts on eggs stored in their cold storage warehouse aggregating $300,000. Mr. ..... believes his Western banks can readily care for the paper given against warehouse receipts.

Mr. ..... after April 1927 of this year will own approximately 50% of the common stock. He has not, however, endorsed for the company in his Western banks and will not do so without similarly doing so at the Eastern banks.

(a) Work out as many of the following ratios as possible and determine their significance from a management point of view and from a credit risk point of view: (1) Ratio of surplus net profits to net worth. (2) Ratio of surplus net profits to volume of business. (3) Rapidity of turnover of total capital. (4) Ratio of operating profits to total capital. (5) Ratio of operating profits to volume of business. (6) Ratio of gross earnings to volume of business. (7) Ratio of costs and expenses to volume of business. (8) Ratio of property expenses to investment and sales. (9) Cost of borrowed capital. (10) Cost of total capital employed. (11) Turnover of inventories. (12) Turnover of accounts receivable. (13) Turnover of fixed property investment. (14) Ratio of current assets to current liabilities. (15) Ratio of earnings left in business to total net earnings.

(b) Summarize your estimate of the management and credit standing of this company.

216. Empire Knitting Mills,[7] New York State

The Empire Knitting Mills was interested in the manufacture of knitted goods. They had been maintaining an account with a New York bank since 1924. The following facts have been ascertained from the bank with which they do business and in so far as they go represent the actual facts. The condensed financial statements, record of average balances kept and loans outstanding and trade and bank comments, give us some interesting data upon which to make a credit analysis and to judge, if possible, what policy the bank should take in regard to providing funds to finance this business in the future.

(A) The comparative statement (on the following page) shows the position of this concern on four semi-annual statement dates.

(B) The daily average balances maintained and outstanding loans used by this firm from December 1924 to December 1926 are as follows:

Balances and Loans

1924	Average Balance	Loans
June		
December	$17,000	$ 35,000
1925		
June	$24,000	$ 64,668
December	12,000	38,710
1926		
June	$30,000	$ 96,920
December	12,000	116,000

(C) Three trade references made the following replies respectively:

October 8, 1925.

We have not done any business with this firm for possibly two years, but during our last business relationship have found the account very unsatisfactory, in so far as they were contentious and would not hesitate to repudiate a contract, particularly when the market conditions were against the purchase. As a matter of fact, there is a lawsuit pending at present time against this concern for breach of contract.

[7] These data show the actual condition of a corporation borrowing in the commercial paper market. The name has been changed for obvious reasons.

Statement for Problem 216

Corporation

NAME Empire Knitting Mills BUSINESS Knitted Goods

ADDRESS New York State

	12–31–24	6–30–25	12–31–25	6–30–26	
Quick Assets	$199,744	$199,416	$193,034	$221,134	
Quick Liabilities	62,460	83,250	46,678	101,042	
Excess Quick Assets	137,284	116,166	146,356	120,092	
Ratio	3.20	2.39	4.13	2.18	
ASSETS					
Cash	24,116	27,988	8,288	30,016	
Notes Receivable (customers)	738	2,938	2,566	2,452	
Accounts Receivable (customers)	100,438	52,978	85,494	66,712	
Merchandise (finished)	22,628	56,254	35,320	52,956	
Merchandise (unfinished)	16,474	15,790	17,114	30,946	
Merchandise (raw)	35,350	43,468	44,252	38,052	
Investments (quoted and salable)					
QUICK ASSETS	199,744	199,416	193,034	221,134	
Real Estate and Buildings	27,000	20,000	20,000	20,000	
Machinery and Fixtures	98,814	113,810	111,140	115,724	
Other Notes and Accounts Receivable		20,594			
Investments (other than quick)	2,000	2,000	2,000		
Deferred					
Advances				1,222	
TOTAL ASSETS	327,558	355,820	326,174	358,080	
LIABILITIES					
Accounts Payable for Merchandise	26,460	22,250	18,678	11,042	
Notes Payable for Merchandise					
Notes Payable to Banks and Brokers	36,000	61,000	26,000	90,000	
Notes Payable Otherwise			2,000		
Accruals					
QUICK LIABILITIES	62,460	83,250	46,678	101,042	
Bonded Debt (when due)	7,000				
Real Estate Mortgages (when due)	12,124	17,776	18,264	24,050	
Reserves					
Capital Stock (Preferred) / Capital Stock (Common) / Surplus	245,974	254,794	261,232	232,988	
TOTAL LIABILITIES	327,558	355,820	326,174	358,080	
Contingent Liability	6 mo.	None		None	
Net Sales	300,088	259,524	298,680	195,800	
Net Profit	23,016	26,576	19,050	2,718	Net Loss
Withdrawals		15,756			
Outside Worth of Endorsers					
Accountant					

October 12, 1925.

There has been no material change in this account since last writing you on February 19, 1925. The account continues in good standing and we are extending to the subject a line of credit of $15,000. At present time they are owing us approximately $9,000 on our regular terms of 2%—30 days, and all of their obligations have been met promptly and none of their indebtedness is due at present.

We have checked this firm as high as $10,000 to $15,000. Payments have been prompt and we regard them as a good credit risk. They do not owe us anything at present.

(D) One bank reported as follows:

September 15, 1926.

I cannot tell you a thing about these people. The account opened with us in September 1923 and closed November 1924. Since that date we have been completely out of touch with their affairs.

(a) Make a careful analysis of this statement and summarize your conclusions as shown by the balance sheets. (b) Study the daily average balance and loan records. Have the loans been too large for the balances maintained? Note changes, if any, which are significant. (c) Read the comments carefully. From these three sources of information outline what you think the bank's policy should be toward this firm.

217. The New York Paper and Products Corporation, Connecticut [8]

The financial statements (shown on the following page) and the trade and bank comments indicate in a general way the standing of this firm.

The average daily balance and loan records were as follows:

BALANCES AND LOANS

1924	Average Balance	Loans
June	$ 4,400	
December	10,000	
1925		
June	$ 6,000	$4,434
December	7,200	5,000
1926		
June	$10,000	$7,864
December	5,200	8,820

[8] These data show the actual condition of a corporation borrowing in the commercial paper market. The name has been changed for obvious reasons.

Statement for Problem 217

Corporation

NAME New York Paper and Products Corporation

BUSINESS Manufacturer of Paper and Paper Products ADDRESS Connecticut

	12–31–24	12–31–25	9–1–26
Quick Assets	$ 47,010	$ 68,992	$ 72,396
Quick Liabilities	46,934	46,916	58,856
Excess Quick Assets	76	22,076	13,540
Ratio	1.00	1.47	1.23
ASSETS			
Cash	19,856	1,314	4,000
Notes Receivable (customers)			
Accounts Receivable (customers)	27,154	39,532	51,396
Merchandise (finished)		15,556	17,000
Merchandise (unfinished)			
Merchandise (raw)			
Investments (quoted and salable)		2,590	
Insurance		10,000	
QUICK ASSETS	47,010	68,992	72,396
Real Estate and Buildings	32,000	12,000	14,000
Machinery and Fixtures	1,954	1,854	2,224
Other Notes and Accounts Receivable	12,502	8,880	8,968
Investments (other than quick)	2,390		2,390
Deferred	10,000		
Surrender Value Life Ins			10,000
TOTAL ASSETS	105,856	91,726	109,978
LIABILITIES			
Accounts Payable for Merchandise	46,934	38,916	56,356
Notes Payable for Merchandise			
Notes Payable to Banks and Brokers		3,000	2,500
Notes Payable Otherwise		5,000	
Accruals			
QUICK LIABILITIES	46,934	46,916	58,856
Bonded Debt (when due)			
Real Estate Mortgages (when due)	21,000		
Reserves		370	370
Capital Stock (Preferred) / Capital Stock (Common) / Surplus	37,922	44,440	50,752
TOTAL LIABILITIES	105,856	91,726	109,978
Contingent Liability			
Net Sales			
Net Profit			
Dividends			
Outside Worth of Endorsers			
Accountant			

The credit folder of its New York bank included the following trade comments:

November 3, 1926.

This account has been with us for a number of years. We have extended them practically unlimited credit, their purchases at times running in excess of $30,000 in a single month. We have implicit faith in the integrity of Mr. ....., proprietor of this concern, and are certain that he would not enter into an obligation that he could not fill. Payments are made as arranged.

May 16, 1925.

Will say that we have been doing business with them for several years and have extended credit to as much as wanted. We have never limited his credit. He has always met his obligations when due.

Mr. ....., of the ..... Products Company, as we know him, is honest, capable and responsible. We have done quite a business with him and all his purchases have been paid as agreed.

This gentleman has been acting as the agent for exclusive sale of our products within the metropolitan district for about ten years. We sell merchandise direct to him, and on some of Mr. .....'s orders we sell direct to his clients. We have trusted this party to the extent of $40,000 on many occasions, notwithstanding that this is out of proportion when judged from standpoint of Mr. .....'s resources, but we have an abiding faith in the business ability and high integrity of the man, and we never have had any fault to find with his personal conduct or the operation of his business. We are satisfied that Mr. ..... will not undertake any obligation unless he feels quite satisfied that the obligation can be fulfilled.

(a) The student should make a study of the facts presented in this case. He should work out as many ratios as are needed and from the information gained from this source and other facts given, prepare a careful report making definite recommendations as to what policy should be adopted by the bank toward this firm for the next twelve months.

218. Brown Structural Steel Corporation,[9] New York State

The following data show the exact position of this firm.

(A) The comparative statement for the three years period ending December 31, 1925, was as shown on the following page.

[9] These data show the actual condition of a corporation borrowing in the commercial paper market. The name has been changed for obvious reasons.

Statement for Problem 218

Corporation

NAME Brown Structural Steel Corp. BUSINESS Contractors

ADDRESS New York State

	12–31–23	12–31–24	12–31–25
Quick Assets	$1,295,098	$1,507,162	$1,781,032
Quick Liabilities	1,359,088	1,401,556	1,623,290
Excess Quick Assets	63,990*	105,606	157,742
Ratio	1.04*	1.07	1.09
ASSETS			
Cash	20,706	15,868	35,666
Notes Receivable (customers)	13,828	35,240	
Accounts Receivable (customers)	581,302	516,906	528,410
Merchandise (finished)			
Merchandise (unfinished)	34,172	300,436	669,916
Merchandise (raw)	645,090	617,312	524,940
Investments (quoted and salable)		21,400	22,100
QUICK ASSETS	1,295,098	1,507,162	1,781,032
Real Estate and Buildings	249,254	381,648	397,116
Machinery and Fixtures	306,944	704,128	814,604
Other Notes and Accounts Receivable			
Investments (other than quick)	21,400		
Deferred	4,996	5,384	6,206
Other Assets		63,910	
TOTAL ASSETS	1,877,692	2,662,232	2,998,958
LIABILITIES			
Accounts Payable for Merchandise	1,009,816	1,227,092	1,467,266
Notes Payable for Merchandise	187,726	60,720	6,658
Notes Payable to Banks and Brokers	76,000	35,000	30,000
Notes Payable Otherwise	71,110	75,626	77,974
Accruals	9,696		28,412
	4,740	3,098	12,980
QUICK LIABILITIES	1,359,088	1,401,536	1,623,290
Bonded Debt (when due.....)			
Real Estate Mortgages (when due.....)			
Reserves—Plant and Equipment		435,512	537,608
Reserves—Insurance		36,400	
Capital Stock (Preferred)	12,000	12,000	12,000
Capital Stock (Common)			
Surplus	506,604	776,784	826,060
TOTAL LIABILITIES	1,877,692	2,662,232	2,998,958
Contingent Liability			
Net Sales			
Net Profit			
Dividends			
Outside Worth of Endorsers			
Accountant			

*Excess quick liabilities.

(B) The loan and daily average deposit records since June 1924 were as follows:

BALANCES AND LOANS

1924	Average Balance	Loans
June	$ 20,000	
December	90,000	
1925		
June	$112,000	$23,352
December	49,000	91,350
1926		
June	$140,000	$95,600
December	172,242	77,534

(C) Trade comments were as follows:

May, 1926

This firm has taken many steel contracts from this office, and in every instance has given the best of satisfaction. I regard Mr. .... as a man of the highest integrity and as an excellent business man. Anyone working as hard as Mr. .... and his brother work should succeed, and I believe they are succeeding where many others fail.

As far as the writer knows these people are doing exceptionally well. They have quite a number of large contracts and are looked upon by the building trade as a very reputable concern.

We have known the ..... Structural Steel Corporation for some time and have employed them for the majority of our steel work. Their officers have always impressed us as being very capable individuals, which our experience with them has confirmed. We also know them to be of very good standing amongst the trade, and from all indications consider them responsible and reliable contractors in every respect.

(D) Two banks reported or commented as follows:

We have discounted for them various of their receivables which have been met in full when due, and we also loan them on direct paper endorsed by Mr. .... and payments are met as agreed.

This concern has maintained an account with us for the past four or five years, keeping very satisfactory balances. At the time the account was opened we made an exhaustive inquiry as to the principals and with very satisfactory results.

(a) Make a carefully prepared written report of this firm including: (1) the capital position; (2) the current position; (3) reserve policy; (4) collection policy; (5) relation between net worth and fixed assets. (b) Make a list of other points which you would want to know in making a final decision regarding the policy to be adopted in financing the concern. (c) Comment upon their loan and average daily deposit record.

219. The Middle Western Manufacturing Company [10]

This company was operating in a small city in a middle western state. It had as facts below will show two very substantial lines of bank credit and was evidently very highly regarded. The time had come in latter part of 1925 when it was thought that a New York bank connection should be opened up. One of the active New York banks having ascertained this fact, began a very thorough credit investigation with a view to soliciting the account. The principal features of that investigation are presented below. The bank solicited and secured the account after completing the investigation.

The credit folder now, January 15, 1927, contains the statements shown on page 174.

The financial statement for June 30, 1926, was accompanied by the following profit and loss or income statement:

INCOME OR PROFIT AND LOSS ACCOUNT
January 1, 1926 to June 30, 1926

Gross Sales		$2,438,234.44
Less Returns		123,733.90
Net Sales		2,314,500.54
From investments		5,012.50
From discounts on purchases		1,306.80
From other sources		1,260.00
Total Income		$2,322,079.84
Cost of Material or Mdse. consumed	$ 705,770.94	
Actual expense of conducting business	1,274,860.28	
Salaries paid officers		
Interest on borrowed funds and bonds	16,114.72	
Bad debts charged off	1,651.48	
Depreciation charged off	56,898.64	
Federal taxes paid	33,100.64	
* Reserved for taxes for current year		
Reserved for other purposes		
Total Charges		2,088,396.70
Net Profit or Loss		$ 233,683.14

*If no provision has been made for payment of Federal taxes for current years, state estimated amount $28,533.10

[10] The data given here shows the actual position of manufacturing company located in a middle western state. The name is fictitious for obvious reasons. The concern manufactures electric pumps, water system outfits, water softeners, etc.

RECONCILEMENT OF SURPLUS

Undivided Surplus close of previous fiscal year		$ 361,023.56	
Items not applicable to current year			
Add	$00,000.00		
Deduct	$23,120.00		
Net deduction		23,120.00	
Balance		337,903.56	
Net Profits or Loss as above		233,683.14	$ 571,586.70
Less Dividends Preferred 8%		37,244.72	
Less Dividends Common 5% per share		40,000.00	77,244.72
Undivided Surplus			$ 494,341.98

The New York bank made several inquiries both from banks and trade people. Two banks reported as follows:

The ..... Company doing nicely. We cannot change our good opinion of them as outlined in our last letter to you. We have loaned them as high as $250,000 direct and around $400,000 indirect. At present direct loans amount to $130,000 and indirect $300,000. They have been keeping good five figure balances with us at all times.

This company has carried an account with us for a number of years, same being conducted in a satisfactory manner, and it is believed they would not assume obligations beyond their ability to meet in accordance with agreement.

Five different trade houses replied as follows:

Company valued customer of ours for past five years. Highest amount of credit allowed $18,000. Give them special terms 2/10 days, 60 days net. They owe approximately $7,200 at present time, $4,000 of which past due now 2 months, and $2,700 now past due two weeks. The last two payments of $12,900 were made in form of Trade Acceptances. Slow in meeting obligations, we still do not hesitate extending them credit to $20,000.

Account is A-1. Pays in 60 days' trade acceptance. Credit up to $40,000.

Have a very high opinion of this firm as we believe they are one of the best in their line, not only as to character of the product but also as to manufacturing and sales policy. Give credit to $28,000 tho prefer to hold to not over $10,000.

Our business with this company carried on trade acceptances issued by them every 15 days payable at ..... National Bank. They always take these papers up promptly at the expiration of 60 days.

We have sold these people for six or seven years on an average $6,000 worth of material per month and consider this concern a very good account, as they have been very prompt with us. They have been progressing very rapidly and are now contemplating an additional large building to take care of their fast growing business. Their officers are very much thought of in our city as to their business ability.

Statement for Problem 219

Corporation

NAME Middle Western Manufacturing Co.

BUSINESS Mfg. Electric Pumps and Water System Mchy. ADDRESS

	12–31–24	12–31–25	6–30–26
Quick Assets	$ 837,164	$1,168,800	$1,578,820
Quick Liabilities	641,020	653,986	1,016,962
Excess Quick Assets	196,144	514,814	561,858
Ratio	1.30	1.78	1.55
ASSETS			
Cash	102,004	156,232	139,184
Notes Receivable (customers)	43,074	83,630	85,102
Accounts Receivable (customers)	135,798	229,034	387,818
Merchandise (finished)	556,288	699,904	949,462
Merchandise (unfinished)			
Merchandise (raw)			
Investments (quoted and salable)			
Trade Acceptances			17,254
QUICK ASSETS	837,164	1,168,800	1,578,820
Real Estate and Buildings	675,456	704,096	839,016
Machinery and Fixtures	778,090	865,844	1,008,168
Other Notes and Accounts Receivable	12,758	19,992	6,430
Investments (other than quick)	53,976	33,384	
Deferred	179,068	44,694	123,660
Goodwill, Patents, etc.	316,034	316,034	316,036
Auto		11,526	
Prepaid Items		112,272	
TOTAL ASSETS	2,852,546	3,276,642	3,872,130
LIABILITIES			
Accounts Payable for Merchandise	109,408	234,226	331,134
Notes Payable for Merchandise	169,008	160,588	63,926
Notes Payable to Banks and Brokers	268,000	238,000	374,000
Notes Payable Otherwise			
Accruals	79,960	20,938	48,108
Deposits	14,644	234	199,794
QUICK LIABILITIES	641,020	653,986	1,016,962
Bonded Debt (when due.....)			
Real Estate Mortgages (when due.....)	58,920	37,660	34,120
Reserves	539,046	597,180	659,110
Capital Stock (Preferred)	838,800	969,400	1,010,200
Capital Stock (Common)	249,700	250,000	250,000
Surplus and Und. Profits	525,060	768,416	*901,738
TOTAL LIABILITIES	2,852,546	3,276,642	3,872,130
Contingent Liability			
Net Sales			2,314,500
Net Profit			233,682
Dividends			
Outside Worth of Endorsers			
Accountant			

* Undiv. profits $494,341.98.

The account was opened in April 1926. The balances carried and loans received were as follows from April 1926 to December 1926, inclusive:

BALANCES AND LOAN RECORD

1926	Average Balance	Loans
April	$36,000	$100,000
May	20,600	100,000
June	20,600	100,000
July	20,600	100,000
August	20,600	100,000
September	50,000	100,000
October	50,000	100,000
November	40,000	100,000
December	40,000	100,000

The officers of the New York Bank noted made the following notations in the credit folder of this concern:

January 26, 1926.
Established line of $100,000 personally endorsed by the officers.

April 3, 1926.
Mr. ....., an officer of Company, called on Monday and said they would open an account within a few days.

August 27, 1926.
Mr. B..... called and left figures for company as of July 31, showing gross sales of $2,438,234.44. The M. National Bank are giving them a line of credit of $250,000 which is only in part used. The City ..... State Bank, gives them a line of $100,000 and would increase if desired.

October 21, 1926.
Executive Committee have this day authorized increasing the accommodation extended to this company from $100,000 up to $200,000.

NOTE: The student should go over all data carefully before trying to draw any conclusions.

(a) What is the current ratio for each year? Is it improving? (b) Has the concern sufficient capital in the business? Has it been a profitable investment for the stockholders? (c) How does the relation between fixed assets and net worth line up? (d) Do you regard the management satisfactory? Why? (e) Write an analysis of this concern from the data given showing whether the concern would be a good risk for a line of credit of $200,000 to $250,000. (f) Was the New York bank wise in opening this account for an out-of-town account? Why?

220. Hudson River Advertising Agency,[11] New York City

The following statements, trade and bank reports give the facts and standing of this firm so far as the available facts show.

(A) The comparative statement for three-year period is shown on the following page.

(B) The loan and daily average deposit records since June 1924 were as follows:

BALANCE AND LOANS

1924	Average Balance	Loans
June	$ 6,400	
December	2,800	$25,000
1925		
June	$20,000	$15,900
December	1,000	25,000
1926		
June	$ 4,000	$19,000
December	4,000	4,900

(C) Some trade comments were as follows:

May 18, 1926.

We are working with them on a cash basis and our relations with them have always been satisfactory. They handle the advertising of several fairly large accounts and we believe that they are thoroughly reliable.

May 14, 1926.

We have had this firm on our books for a number of years and have found them to be very satisfactory credit risk.

May 15, 1926.

We have had business dealings with them for many years. Their bills are always paid promptly and we regard them as excellent financial risk and good advertising agency.

October 15, 1925.

They have always discounted our bills and we have extended them credit for some months as high as $6,000.

(D) One bank official made this comment:

One member of firm called today to talk about discounting a note for $4,500 and stated that they had been making profits since July 1st. He stated that they had set aside sufficient amounts to guarantee proper balances.

[11] These data show the actual condition of a corporation borrowing in the commercial paper market. The name has been changed for obvious reasons.

Statement for Problem 220

Corporation

NAME Hudson River Advertising Agency BUSINESS

ADDRESS New York City

	12–31–24	12–31–25	12–31–26
Quick Assets	$101,764	$131,976	$130,626
Quick Liabilities	75,412	107,040	78,770
Excess Quick Assets	26,352	24,936	51,856
Ratio	1.34	1.23	1.65
ASSETS			
Cash	3,000	13,290	21,104
Notes Receivable (customers)		2,432	4,244
Accounts Receivable (customers)	96,418	114,200	103,224
Merchandise (finished)	2,346		
Merchandise (unfinished)		2,054	2,054
Merchandise (raw)			
Investments (quoted and salable)			
QUICK ASSETS	101,764	131,976	130,626
Real Estate and Buildings			
Machinery and Fixtures	4,106	5,500	
Other Notes and Accounts Receivable	39,190	10,860	27,834
Investments (other than quick)	9,500	33,168	
Deferred	4,164	25,212	212
Goodwill	130,468	120,548	
TOTAL ASSETS	289,192	327,264	158,672
LIABILITIES			
Accounts Payable for Merchandise	50,616	70,352	69,090
Notes Payable for Merchandise		31,308	9,680
Notes Payable to Banks and Brokers	17,218		
Notes Payable Otherwise			
Accruals	7,578	5,380	
QUICK LIABILITIES	75,412	107,040	78,770
Bonded Debt (when due.....)			
Real Estate Mortgages (when due.....)			
Reserves	1,032		
Capital Stock (Preferred)	200,000	200,000	
Capital Stock (Common)	12,748	20,224	79,902
Surplus			
TOTAL LIABILITIES	289,192	327,264	158,672
Contingent Liability			
Net Sales		815,000	
Net Profit		25,724	
Dividends: %			
Outside Worth of Endorsers			
Accountant			

(a) Write up a carefully prepared report for this firm from the data presented. (b) Criticize the report. Show what other facts are needed in order to prepare a complete report. (c) What policy, if any, would you suggest to the management of this firm regarding their future? (d) Look up their rating in Dun's or Bradstreet's.

221. Texas Jewelry Company,[12] Texas

The Texas Jewelry Company operates its store in one of the leading cities in the state of Texas. It has a substantial business which requires different banking connections. It is applying for a line of credit with a New York City bank. The balance sheets for the past three years (shown on the following page) have been received by the New York bank and set up on the comparative statement sheets in this form.

In reply to a request an agency sent the bank the following:

Personnel

Major portion of the stock of this company is held by the President and Vice-President. Both of these men have had long experience in this line of business.

History

This concern was established and incorporated under ..... laws in 1897. It has been in continuous operation since then. The company handles a complete line of jewelry and diamonds at wholesale and operates on a paid-in capital of $1,000,000.

Financial Information

The company has operated at a satisfactory margin of profit during the past several years and has made progress due to the fact that earnings have been reinvested in the business. The late balance sheet makes a very satisfactory liquid showing.

Bank and Trade Comment

Two depositories extend substantial lines of accommodation which are not continuously used by any means. Balances are satisfactory and relations cordial. A portion of requirements is imported. Domestic trade bills are invariably discounted when the privilege is accorded, while on net terms payments are made promptly.

General Information

The company's merchandise is advertised thru various trade journals and a house organ is also published. The territory covered includes the whole Federal Reserve District of..... Selling terms are 6%/10 days, net four months, but it is customary in this particular line to give January on fall bills. The company does not operate any branches in the conduct of the business. About 25 people are employed.

[12] These data show the actual condition of a corporation borrowing in the commercial paper market. The name has been changed for obvious reasons.

Statement for Problem 221

Firm or Individual

NAME Texas Jewelry Co. BUSINESS Wholesale Jewelry ADDRESS Texas

	1–31–24	1–31–25	1–31–26
Quick Assets	$1,278,970	$1,268,182	$1,479,026
Quick Liabilities	283,752	339,674	409,474
Excess Quick Assets	995,218	928,508	1,069,552
Ratio	4.50	3.44	3.61
ASSETS			
Cash	159,684	128,340	74,112
Notes Receivable (customers)	103,074	84,710	116,836
Accounts Receivable (customers)	277,120	300,470	428,908
Merchandise (finished)	739,092	754,662	859,170
Merchandise (unfinished)			
Merchandise (raw)			
Investments (quoted and salable)			
QUICK ASSETS	1,278,970	1,268,182	1,479,026
Real Estate and Buildings		11,290	10,806
Machinery and Fixtures	8,324	7,208	4,352
Other Notes and Accounts Receivable	3,004	4,972	46
Investments (other than quick)	34,150	18,140	63,700
Deferred	4,840	5,476	5,220
Unpaid Stock Subscrip	50,000	50,000	
Vendors		56,988	34,286
TOTAL ASSETS	1,379,288	1,422,256	1,597,436
LIABILITIES			
Accounts Payable for Merchandise	267,556	319,450	337,034
Notes Payable for Merchandise			
Notes Payable to Banks and Brokers			50,000
Notes Payable Otherwise			
Accruals	2,716	20,224	
	13,480		22,440
QUICK LIABILITIES	283,752	339,674	409,474
Real Estate Mortgages (when due.....)...			
Reserves			
NET WORTH	1,095,536	1,082,582	1,187,962
TOTAL LIABILITIES	1,379,288	1,422,256	1,597,436
Contingent Liability			
Net Sales	1,625,368	1,862,280	2,016,890
Net Profit	92,188	127,044	145,378
Withdrawals	28,500	140,000	40,000
Outside Worth of Endorsers or Partners			
Accountant			

(a) Analyze and write a report of the data submitted. (b) Make a complete list of other data you want. (c) Show how this additional data could be obtained. (d) Upon the basis of facts already submitted would you favor opening an account with this firm? If your decision is in the affirmative, what line of credit, if any, would you extend? (e) Why in your judgment does this firm need a New York account? (f) What does it mean to "give January on fall bills"? If a bill were sold November 10 on 6%/10 days, net four months and January were given, show the effect of the sales terms on accounts receivable.

222. Gasoline and Fuel Company,[13] New York City

Reports show that this business is owned by three men, two of whom are highly salaried men in the employ of the firm, and the third lives abroad and takes no active part in the operation. Their principal business consists in supplying gasoline and other products to their customers around the port of New York. Their customers are largely marine firms. They own three or four small delivery boats which are used in carrying on their business. The size of the business and financial position are fairly well represented by the comparative statement shown on the following page.

The loan and average daily balance record are shown by the following table:

BALANCES AND LOANS

1925	Average Balance	Loans
June	$10,000	None
December	8,300	None
1926		
June	$ 7,000	None
December	5,000	None

One firm with which the Gasoline and Fuel Company had done business made the following brief comment in response to an inquiry from the bank:

January 25, 1926.

We have had a very satisfactory experience with this company over a period of some three or four years. From a capital investment of about $1,800 they have shown growth until at present they have a net worth of about $50,000. We think very well of the management.

[13] These data show the actual condition of a corporation borrowing in the commercial paper market. The name has been changed for obvious reasons.

Statement for Problem 222

Corporation

NAME Gasoline and Fuel Company BUSINESS ADDRESS N. Y. C.

	12–31–24	12–31–25	12–31–26
Quick Assets	$ 8,152	$ 41,212	$ 70,312
Quick Liabilities	28,110	24,576	64,218
Excess Quick Assets	19,958*	16,636	6,094
Ratio	.34*	1.68	1.09
ASSETS			
Cash	184	11,988	5,576
Notes Receivable (customers)			
Accounts Receivable (customers)	7,168	25,360	50,568
Merchandise (finished)	800	3,864	7,274
Merchandise (unfinished)			
Merchandise (raw)			
Investments (quoted and salable)			
Cash Guaranty			604
Insurance Premium			6,290
QUICK ASSETS	8,152	41,212	70,312
Real Estate and Buildings			
Machinery and Fixtures	62,998	65,316	74,940
Other Notes and Accounts Receivable			
Investments (other than quick)			
Deferred		864	3,514
TOTAL ASSETS	71,150	107,392	148,766
LIABILITIES			
Accounts Payable for Merchandise	7,586	23,570	48,228
Notes Payable for Merchandise			
Notes Payable to Banks and Brokers			
Notes Payable Otherwise	19,200		10,800
Accruals	1,324	1,006	5,190
QUICK LIABILITIES	28,110	24,576	64,218
Bonded Debt (when due.....)			
Real Estate Mortgages (when due.....)			
Reserves			3,152
Capital Stock (Preferred)	1,800	1,800	1,800
Capital Stock (Common)			
Surplus	41,240	81,016	79,596
TOTAL LIABILITIES	71,150	107,392	148,766
Contingent Liability			
Net Sales	120,684		112,678
Net Profit	11,274		6,376
Dividends			
Outside Worth of Endorsers			
Accountant			

* Excess quick liabilities.

The credit folder of the New York bank contained among other things the following statements:

Mr. ..... called, leaving with us a Sept. 1, 1926 statement. He stated that this company was doing a very profitable business and was in good condition. Of course their ratio is not much, but this is due to the fact that they are paying themselves large salaries, which is being done at his suggestion so that they will not have to pay out any dividends to the man who holds the 1/3 interest and lives abroad. All funds in excess of these salaries will be put into surplus. It is the company's desire to borrow from $10,000 to $20,000 in order to discount their ordinary trade purchases. Mr. ....., one of the members of the firm, stated that he personally would not recommend the company for any type of loan other than on assigned accounts.

It was agreed to consider favorably this company's application for credit on assigned account basis. Amount will be decided at the time of their application. October 14, 1926.

(a) Does this concern show a healthy growth? Why? (b) Were the arguments advanced by Mr. . . . . , a firm member, convincing? Would you accept as satisfactory their explanation of high salaries paid? (c) Do you justify their policy toward their absent partner? Explain. (d) From a study of the facts presented what are your general conclusions regarding this firm?

CHAPTER IX

INTERBANK RELATIONS

223. Interbank Exchange of Credit Information

Banks frequently find that they need credit information either for themselves or their customers concerning individuals, firms or corporations which carry on their business in some other locality. To secure such information the banks are forced to rely upon others. Banks are supplying a considerable volume of credit information to one another. This class of information is usually furnished upon the written request of the bank in need of it. Letters are generally written which show the purpose for the request of such data. The following give the actual content and form of such requests:

1. It is our impression that we both share the business of .....
We are revising our credit files and shall appreciate a summary of your experience with this account. It will also be of value to receive your opinion of the subject's present financial position, as well as any credit information you may have concerning those in charge of its affairs.
Please do not hesitate to call upon us whenever we can be of like service to you.

2. We are interested in securing as close information as possible regarding the .....
We understand that this bank has recently been formed, and we shall appreciate it if you will be good enough to favor us with such data as you may have, or can readily obtain, relative to the bank in question; also regarding the gentlemen who are identified with the organization.
In addition, we should like to know the authorized capital of the new institution.
Please call upon us if at any time we can serve you in a similar manner.

3. Some time ago you were kind enough to give us your opinion regarding .....
We are desirous of bringing up to date our credit information regarding this house, and we shall be pleased to learn your present opinion respecting its financial responsibility, general standing and management.
Your reply will be considered confidential and we shall be pleased to be of like service to you at any time.

4. We are revising our credit information regarding .....
We shall appreciate receiving the benefit of any information you may have relative to the present standing of this institution, and your opinion of its management and directorate.
It will give us pleasure to reciprocate this favor at any time you may have occasion to call upon us.

5. As we do not appear to have had the pleasure of a reply to our letter of ..... in which we asked for a copy of your statement, we presume our communication either became mislaid or went astray.

If you have no printed copies for distribution we should appreciate receiving a newspaper clipping containing a statement bearing a recent date, or a typewritten copy, as we, of course, like to have up to date information concerning the progress of banks with which we have transactions.

(a) Should banks give out credit information about their customers? Is this a violation of confidence? (b) Of what value would such information as is indicated in these letters be to the bank? (c) Should the person requesting information state the reasons for his request? Should the bank send a copy of the financial statement to the requesting bank? (d) Summarize what you consider to be the essential points in these different form letters. (e) Why do banks refrain from interchange of credit information about their customers more than do commercial houses?

224. The Bank of Italy and the Bancitaly Corporation

The *Commercial and Financial Chronicle,* March 26, 1927, p. 1727, commenting upon the merger between the Bank of Italy and the Liberty Bank of America stated that:

Further steps have been taken in development of the ambitious bank extension plans of the promoters. The Borough of Brooklyn is now to be entered. In our news columns on March 5 we reported that negotiations were under way looking towards the consolidation of the Sessa chain of private banks in Brooklyn with the Commercial Exchange Bank of New York located at 63 Wall Street. The Sessa banks are said to form one of the largest groups of private banks in the city, having assets of approximately $5,000,000. With the Bancitaly Corporation having $100,000,000 of new capital available we may expect other similar moves in quick order.

This use of the holding company in acquiring banks in different Federal Reserve districts brings to the front some important and very grave problems regarding our Federal Reserve banking system. The Bancitaly Corporation, through the subsidiary banks which it controls, already holds membership in the Federal Reserve Bank of San Francisco and the Federal Reserve Bank of New York. It therefore is in position to avail of the facilities of the Federal Reserve banks in these districts—that is to borrow from either one or both of them. How long will it be before it enters some of the other Federal Reserve districts and perhaps all of them?

But that is not all. Is it reasonable to suppose that the Bancitaly Corporation will be allowed to remain alone in its endeavor to establish, not merely State-wide banking, but nation-wide banking? If a great banking organization on the Pacific Coast reaches out for the Atlantic seaboard through the holding company does it not inevitably follow that the big banking organizations in New York will repeat the experiment and in like manner extend their field of action to the Pacific Coast? In truth, will

they not be compelled to take such step as a matter of necessity, in order effectively to compete with the invader? As a matter of fact, it has been reported this very week that one of the largest of the New York City banks, or at least those associated with it, were seeking to gain a foothold on the Pacific through a holding company.

(a) What is the relation between the Bank of Italy and the Bancitaly Corporation? Is this relationship different from that between the Baltimore Commercial Bank and the Baltimore Commercial Company? (See Problem 225.) (b) Is the foregoing statement overdrawn, or are we likely to see these large commercial banks establishing their national system? (c) Is this type of banking properly called chain banking? Why? (d) Why should a New York bank want a subsidiary or security company in California? a California bank want such connection in New York?

225. Commercial Banks and Subsidiaries

During recent years there has been a marked tendency for commercial banks to establish through their own stockholders or outright security companies. The subsidiary operates under a separate charter but in close touch with the bank. The following quotations taken from the *Commercial and Financial Chronicle,* March 19, 1927, pp. 1622-23, shows an American bank and a Canadian bank with such connections:

The Baltimore Commercial Bank, Baltimore, announced recently the organization of a subsidiary institution under the title of the Baltimore Commercial Co., with an authorized capital stock of $250,000. The new company, it was stated, would place at the disposal of the depositors and customers of the bank a complete service by which they may seek counsel and advice in making safe and sound investments. The officers of the new concern are from the official staff of the Baltimore Commercial Bank, and in addition include a Vice-President, R. G. Lyne, formerly of the investment department of the Equitable Trust Co. of New York. The company's offices are located in the main building of the bank, 26 South Street.

Formation of the Montreal Company of New York, Inc., organized for the purpose of underwriting and distributing investment securities, is announced by the Bank of Montreal, one of the largest banking organizations in Canada, with branches in the principal cities of the United States. The new company, which will maintain offices at the New York headquarters of the Bank of Montreal, at 64 Wall Street, will be controlled through stock ownership by the banking institution. The new securities corporation has been organized under the laws of the State of New York with a nominal capital. While the formation of the company is a new departure, the Bank of Montreal for some time past has been actively associated in New York in the public offering of high-grade Canadian securities. In organizing the Montreal Company of New York, the bank is following somewhat the policy of certain large American and English

banks which have already formed subsidiary companies for a similar purpose.

(a) Branch banking is permitted in Baltimore, Maryland. Why did not the Baltimore Commercial Bank establish a branch? What functions may the Baltimore Commercial Company perform that could not be carried on by a branch? (b) Why should the Bank of Montreal organize a subsidiary company in New York City? What functions can such an institution carry on? (c) Is the practice of establishing such companies by American banks regarded favorably by the public in this country? Why?

226. Essential Features of Interbank Accounts

The initiative for opening correspondent accounts may be taken either by the small bank seeking connections in the large financial centers, or by the large banks located in larger financial centers because they specialize in that type of business. These accounts have become very desirable and are actively solicited by the larger banks. Competition has driven most banks to give essentially the same type and kind of services and privileges granted by other large banks to their correspondents. On the other hand, the smaller banks are required to give about the same information to one bank as another. In the cases where two large banks of approximately equal size but located in different financial centers, are carrying interbank accounts, the problem of establishing connections are somewhat different. The amount of services to be rendered and amount of balances to be maintained are of prime interest.

In a general way the various kinds of information and records kept by the larger banks in their folder are as follows:

1. List of officers and directors
2. Statement of the bank
3. Average daily balance
4. Loan record: Maximum and rate, security, personal and outside loans, commitments
5. Credit information
6. Affiliations of borrowing bank
7. Guaranties
8. Inquiries and general correspondence

(a) Compare the contents of this kind of credit folder with that maintained by the bank for one of their large corporation accounts. Note any differences. (b) Outline the contents and importance of the loan records. (c) Of what significance is the average daily balance? What, if any, are the relations to the maximum line of credit extended and the rate granted? (d) Discuss "affiliations of borrowing bank."

Illustrate by concrete examples. Does the Clayton Act bear upon this in any way? Explain.

227. Acceptance Credit Agreement

One large Co-operative Marketing Association outlined its financing as follows:

ACCEPTANCE CREDIT AGREEMENT: Last year the major part of our financing was done through the medium of Bankers' Acceptance. We found this form more satisfactory than notes, in that Bankers' Acceptances are more readily marketed and at the same time enable the bank to extend us a larger line of credit than they are permitted to do by straight loans. This same form of Acceptance Credit Agreement is used in what we term our permanent financing.

$..... No. .....

ACCEPTANCE CREDIT AGREEMENT

For and in consideration of the acceptance by..... of....., of our draft(s) on them numbered..... ..... dated....., payable..... at....., as follows: .....drafts in the amount of.....Dollars, ...drafts in the amount of.....Dollars, ...drafts in the amount of.....Dollars, a total of .....Dollars, as part of the same transaction, we hereby promise and agree, on or before the day prior to the due date of said draft(s) to pay to the Bank the amount payable by the said Bank thereon, and as collateral security for the due and punctual performance for such obligation, we have deposited with and assigned to.....THE SAVINGS BANK AND TRUST COMPANY, of....., as Trustee for the said Bank .....warehouse receipts or bills of lading, representing..... bales of cotton. And the undersigned has given to said Trustee for the benefit of the said Bank, or its assigns, full power to sell, assign or deliver the whole or any part of said collaterals, or any substitute therefor, or any additions thereto, at any Brokers' Exchange or elsewhere at public or private sale, on the non-performance of any of the promises herein contained, and without notice of amount due or claimed to be due, without demand for payment, without advertisement and without notice of the time or place of sale, each and every one of which acts is hereby expressly waived; and at any such sale, the Bank, its assigns or any of the officers of said Bank, may purchase on its own account, and without further accountability, except for the purchase price thereof, the whole or any part of the property sold free from any right of redemption on the part of the undersigned, which right is hereby waived and released.

It is further agreed that any surplus arising from the sale of said collaterals beyond the amount due hereon shall be held by the said Trustee to be applied in discharge of any other indebtedness due by the undersigned Association to the said Bank as the said indebtedness matures.

It is also agreed that said collaterals may from time to time, by mutual consent, be exchanged for others, which shall also be held by said Trustee on the terms above set forth.

It is also agreed that the said Trustee may, in its own discretion or at the instance of the said Bank, demand additional collateral when the margin of collateral shall be less than thirty-five (35%) per cent of the amount of the loan, and such additional collateral shall be held by the said Trustee subject to the terms and conditions of this agreement. Any failure to deposit the said collateral within thirty-six (36) hours after demand for the same has been made will immediately cause the obligations herein referred to to become due and payable and the Trustee shall thereafter proceed as is hereinbefore provided for in the event of default in the payment of the said obligations.

The rights given by this document to the said Bank are transferable by endorsement.

.....Cotton Growers Co-Operative Association

By.....
Secretary-Treasurer

....., 192....

TRUSTEE'S CERTIFICATE

This is to certify that the drafts referred to in the within acceptance agreement are a part of the "revolving Fund" provided for in "The Revolving Fund Agreement of 1923," and that the..... Cotton Growers Co-Operative Association has certified to the undersigned Trustee that the said Association has purchased from its grower-members .....bales of cotton, the title to which has been assigned to the said Trustee as collateral to secure the obligations issued under the above "The Revolving Fund Agreement of 1923."

The Trustee holds a Banker's Letter, issued by the —— Insurance Company of New York City, in which it is stated that the above cotton is fully and adequately insured.

The.....Savings Bank and Trust Company,
Trustee

By.....
Trust Officer

BANKERS' ACCEPTANCE: This form was used with our local banks in connection with the Acceptance Credit Agreement mentioned above. It is used both in the Revolving Fund financing, as well as the latter financing where the loan is secured by completed negotiable warehouse receipts.

COLLATERAL NOTE: After the revolving fund is retired, we sometimes borrow from the local banks on this form of collateral note. You will observe that this carries the usual certificate on the back.

TRUSTEE: You will note that a trustee is appointed who has charge and custody of all receipts issued to the Association. The duties and

functions of the trustee are set out in the Revolving Fund Agreement. In addition the Association has an agreement with the Trustee Bank. This agreement is the usual form of Acceptance Credit Agreement entered into by borrowers and the accepting bank. It merely sets out certain things that the Association must do and which the bank will undertake to do. This agreement provides for a line of credit of a certain amount extending over a period of six to seven months. That is to say, the bank agrees to accept up to a certain amount, drafts drawn on it, the said drafts then being marketed by the bank in the open market. The rate of interest varies with the market rate. Under our arrangement we pay the customary commission to the bank for accepting, which is usually 1½% per annum, and the net cost of the money depends entirely on the market rate when the acceptances are sold. The funds this Association obtained in New York last season cost us slightly in excess of 5½%. Of course complete negotiable warehouse receipts are deposited with the Trustee Bank to secure the line of credit and the acceptances remain secured throughout their life.

BANKERS' ACCEPTANCES: This form of Bankers' Acceptances was used under the credit arranged with the Bank. With our local banks we do not enter into any written agreement. At the beginning of the season these banks usually give us a line of credit for the entire season. It may interest you to know that our aggregate borrowing last season was something over Ten Million Dollars ($10,000,000) and about ninety per cent of the same was done through the medium of Bankers' Acceptances.

(a) What is a revolving fund? (b) Why did co-operative marketing associations resort to the acceptance credit plan for financing the marketing of the commodity turned over by the members? (c) How would the rate of interest paid correspond to the local rate? (d) What are the duties of the trustee bank? What was the commission paid to it in this case? (e) Why did the association not enter into a written agreement with its local bank?

228. Repurchase of Bankers' Acceptances by Federal Reserve Banks

Although the law prescribes a minimum amount of reserve balance which members must carry with Federal reserve banks there is nothing to limit the amount of reserve which may be carried in this way. It has been found convenient by some banks, therefore, to place much more than the required minimum with local reserve institutions. By so doing they avoid the inconvenience and danger involved in holding an unduly large supply of cash in the vault; and, though they sacrifice the interest which they might earn were they to deposit these balances with other institutions, they can, with the aid of the reserve bank, largely make up for this loss. A number of reserve banks have undertaken to keep such surplus reserves invested in bankers' acceptances, paying the interest thereon to the member banks and at the same time converting the bankers' acceptances into reserve balances through repurchase, whenever the reserve balance drops below the specified percentage required by law. This function of keeping

reserve cash invested is undoubtedly permitted under the regulations of the Board, and, as exercised by the reserve banks, is a distinct service function enabling the members to maintain an unusually liquid condition if they so desire.—[Willis & Steiner, Federal Reserve Banking Practice, p. 107, D. Appleton & Co., New York, by permission.]

(a) Does the Federal Reserve Act give the federal reserve banks the right to carry on such transactions? Explain. (b) What is the underlying purpose in this practice—to maintain reserves, invest member banks' funds, or some other reason? (c) If the federal reserve banks were allowed to pay interest on member bank balances in excess of reserve requirements, would the practice be different? Explain. (d) Does the same practice prevail among large commercial city banks and their country correspondents?

229. Commercial Banks and Cattle Loan Companies

Loan companies are located in all the large livestock markets, and some have been organized in producing centers. Some of these companies are independent, while others are affiliated with state or national banks located at the stockyards, the relationship being usually that of interlocked directorates or the possession of officers in common. The parent banks' reason for such affiliation is that they are limited in the amount of loans they can make to one client, usually 10 per cent of their capital and surplus, and from the point of view of profits the larger cattle loans are the most desirable. Other advantages of organizing affiliated loan companies are: (1) the loan company does not have to keep a legal reserve; (2) the loan company is not subject to the double liability on stockholders; (3) the bank has a convenient source of commercial paper.

The loan company also enjoys certain advantages from this affiliation: (1) it has an added prestige; (2) it can use the bank's credit department and machinery; (3) it can turn over the small loans to the bank; (4) in dull times it can sell the surplus paper to the bank's correspondents.

Among the officers of the loan company is sometimes found a practical cattleman, who not only passes on the loans but also inspects the collateral offered as security. In some companies inspectors are employed whose duties are to travel over the territory where loans are made and make inspections of the ranches, cattle, and facilities for handling them, at least once during the life of the loan. Other companies use resident inspectors, who are called upon from time to time to make inspections and reports.

The amount loaned varies from 50 to 80 per cent of the full value of the stock; a margin of 20 to 25 per cent is considered amply sufficient, for the natural increase in weight and number of the animals reduces the hazard of cattle loans. The size of the loan varies from a few hundred to a million dollars. Small loans are more advantageously made through local agencies, since local agencies are familiar with the applicant and his financial standing and do not have the expense of inspection. Moreover, small loans are generally too costly for cattle-loan companies.

The loans are for short terms, generally running for six months. This period of time is adopted because of the rediscount feature of the

cattle-loan business, and because that length of time will ordinarily be long enough for the "feeding out" of a bunch of cattle. In the case of loans on stockers and breeders, it is understood that the loans will be renewed if desired. The loans are commonly classified as feeder loans, stocker loans (on cows, on young stock, and "summer loans"), and dairy loans. It is assumed, of course, that the proceeds of the loan will be devoted to the improvement of the herd.

The interest rates depend upon the rediscount rate and the degree of competition among borrowers and among lenders. Only marked fluctuations of the rediscount rate affect the local rates charged. The rates will also be graduated according to the desirability of the applicant. The cost of inspection has an important bearing upon the loan rate, for it must be assessed back upon the borrower, and therefore borrowers living in remote and isolated places have to pay higher interest rates.—[Westerfield, Banking Principles and Practice, Vol. II, 1921, pp. 457-59, The Ronald Press Company, New York.]

(a) What is a cattle loan company? What condition existed in the cattle industry that made it possible? (b) Does cattle paper provide a safe place for bank funds? (c) Why should this paper be sold to the banks in the eastern part of the country? (d) Should commercial banks be permitted to own stock in a cattle loan company? Why?

230. Interbank Balances, Loans and Rediscounts

During recent years considerable attention has been given to the interbank relationships including interbank borrowing and interbank balances. The two items, rediscounts and bills payable, were very prominent in 1920. These declined greatly after 1921. The following table has been prepared to give the total volume of bank balances, notes and bills rediscounted, and bills payable:

TABLE SHOWING CERTAIN STATISTICS ON INTERBANK RELATIONSHIP
(000 omitted)

Year ending June 30	National Banks				State Banks, Stock Savings Banks, Loan and Trust Companies and Private Banks			
	Due from Banks	Due to Banks	Notes and Bills Redisc.	Bills Pay.	Due from Banks	Due to Banks	Notes and Bills Redisc.	Bills Pay.
	$	$	$	$	$	$	$	$
1920	3,121	2,844	876[1]	115[2]	2,548	864	285	793
1921	2,385	2,151	452[1]	140[2]	2,238	658	392	782
1922	2,749	2,502	281	228	2,479	742	155	406
1923	2,745	2,409	353	371	2,670	1,201	181	410
1924	3,041	2,821	197	144	2,871	1,107	129	329
1925	3,294	2,886	234	245	3,279	1,480	94	352
1926	3,364	2,899	269	254	3,194	1,431	115	386

[1] Bills payable with federal reserve banks. [2] Bills payable other than with federal reserve banks.
[Compiled from Annual Reports of Comptroller of Currency.]

(a) Why do banks maintain balances with other banks? Has "Due from Banks" increased faster in one class than another? Which? How do you explain this? (b) Why should not the total of "Due from Banks" be equal to the total of "Due to Banks"? (c) What distinction, if any, do you make between notes and bills rediscounted and bills payable? (d) What significance have the total figures for rediscounts and bills payable? How do you account for the decrease in 1924 and the increase in 1926? (e) Have rediscounts and bills payable varied more among national banks or among state banks and trust companies?

231. National Banks That Borrow

A compilation made from the reports submitted by national banks at the close of business April 28, 1921, discloses the fact that of the 8,152 national banks from which reports were received, 3,243 banks, or 39.78 per cent of the number reporting, were not borrowing either from Federal reserve banks or elsewhere. The percentage of the loans and discounts of nonborrowing banks to the loans and discounts of all national banks was 26.48; the percentage of cash in vault of these banks to the cash in vault of all banks, was 37; and the percentage of the total deposits of these banks to the total deposits of all banks was 30.50.

The percentage of loans and discounts of all national banks to total deposits on the date indicated, was 76.54; and the percentage of loans and discounts to total deposits of nonborrowing banks was 66.46.—[Report of the Comptroller of the Currency, 1921, p. 58.]

(a) How would the above percentages be affected by season of the year? (b) Comment on the geographical differences shown in the following table:

Ratio Between "All Banks Reporting" and "Banks Reporting No Bills Payable or Rediscounts"

Section	Loans and Discounts	Cash in Vault	Deposits
New England States	25.14%	32.82%	27.61%
Eastern States	25.78	35.57	30.65
Southern States	26.87	36.69	31.46
Middle Western States	26.64	40.60	29.51
Western States	27.41	35.99	31.33
Pacific States	28.88	36.39	32.66
Total United States	26.48%	37.00%	30.50%

(c) In what sections is it more often regarded a sign of weakness for a bank to borrow? In what regions is eligible paper less likely to exist in plenty?

232. Rediscounts of the Twelve Federal Intermediate Credit Banks as of April 16, 1927

The following statement shows a classification of the total volume of rediscounts of the twelve federal intermediate credit banks on April 16, 1927.

CLASSIFICATION OF REDISCOUNTS

District	Rediscounts	Agri. Credit Corporations	National Banks	State Banks	Livestock Loan Companies	Savings Banks & Trust Co's
1. Springfield	$ 452,703.67	$ 451,753.67	$ 950.00	$.....	$.....	$.....
2. Baltimore	1,259,324.47	965,726.54	.....	291,939.88	.....	1,658.05
3. Columbia	8,439,530.01	8,413,558.20	.....	25,971.81	.....	.....
4. Louisville	234,625.26	166,312.99	13,605.19	54,707.08	.....	.....
5. New Orleans	5,829,311.07	5,675,227.99	.....	5,740.00	148,343.08	.....
6. St. Louis	1,279,164.20	964,407.29	.....	57,830.00	256,926.91	.....
7. St. Paul	5,528,631.58	5,378,287.72	.....	68,143.86	82,200.00	.....
8. Omaha	4,690,190.89	.....	.....	.....	4,690,190.89	.....
9. Wichita	1,761,848.34	343,755.05	.....	59,036.17	1,324,057.12	35,000.00
10. Houston	7,392,010.14	562,176.95	.....	.....	6,829,833.19	.....
11. Berkeley	6,792,365.04	2,984,499.50	.....	.....	3,807,865.54	.....
12. Spokane	4,289,337.31	2,262,923.78	.....	.....	2,026,413.53	.....
Total	$47,949,041.98	$28,168,629.68	$14,555.19	$563,368.80	$19,165,830.26	$36,658.05

(a) Under what conditions may a national bank or state bank rediscount with a federal intermediate credit bank? (b) May a federal intermediate credit bank rediscount with a federal reserve bank? If so, what kind of paper will be acceptable to the federal reserve bank? (c) Outline the method by which a cattle loan company may obtain funds from a federal intermediate credit bank. (d) What is an agricultural credit corporation? Why should they have access to the federal intermediate credit banks? (e) Discuss the table showing why the rediscounts are divided among different borrowers on a geographical basis.

233. Interbank Reserves in 1907

The chief weakness of our present national banking system is the provision in regard to reserve deposits, which piles reserve on reserve, in reserve cities and central reserve cities, without requiring a sufficient amount of actual cash reserve on hand. As we have seen in the present crisis, when a real emergency arises these reserves are not reserves at all, because they may in a day become unavailable.

It will be an improvement to add to the proportion of reserve to be held in cash by the country banks and the reserve city banks, but the proper solution of the difficulty is to increase the amount to be held in cash by all the banks and require all the reserve deposits to be kept with a central bank organized for that purpose. The increase in cash reserves from 6 to 10 or even 15 per cent in the country banks would not help a bank very much when it had any large demand for its deposits. What such a bank needs is a safe reserve in cash and a further reserve with a bank where it is surely available, at any time, in currency. This would be the case with reserve deposits in a central bank. Further than this, the depositing bank could be sure that at any time, as long as it was solvent, it could go to the central bank and get any amount of cash needed on the notes of its customers, or other good security. With such a bank to depend on, no solvent bank need ever have any fear of its ability to meet all demands.

Under this reserve system, deposits of $10,000,000 in country, or non-reserve city banks, would call for a cash reserve to be kept in their vaults of but $600,000. They could carry and count as reserve $900,000, on deposit with reserve city banks. These reserve city banks would be required to have in their vaults cash to the amount of only $112,500, and might deposit $112,500 in central reserve cities, who, in turn, would have to have on hand 25 per cent, or but $28,125 in cash.

To recapitulate this in the form of a table:

CASH RESERVE ON DEPOSITS OF $10,000,000

	Amount of Deposits	Cash Reserve in Vaults	Deposited with Reserve Agents	Possible Loans
Country banks	$10,000,000	$600,000	$ 900,000	$8,500,000
Reserve city banks (amount above deposited by country banks)	900,000	112,500	112,500	675,000
Central reserve city banks (amount as above deposited by reserve city banks)	112,500	28,125	.....	84,375
Total	$11,012,500	$740,625	$1,012,500	$9,259,375
Per cent of total deposits		6¾	9⅛	84
Per cent of original deposit		7⅜	10⅛	92½

Amount of cash outside original country banks, $140,625, or 1.4 per cent.

[Report of the Comptroller of the Currency, 1907, pp. 71–2.]

(a) What is a scattered reserve? a divided reserve? concentrated reserve? Illustrate each by reference to the history of banking in the

United States. (b) Which group maintained the largest reserve ratio? Which group should? Why? (c) Why should country banks and reserve city banks be permitted to keep part of their reserves in the vaults of central reserve city banks? Why not keep all there? (d) How did a panic or depression usually affect these reserve balances? Why? (e) Were these reserves kept for any other reason than that of meeting the reserve requirements of the National Bank Act? Explain.

234. Brokerage Loans in New York City

The following data taken from the Federal Reserve Bulletin indicate the extent and importance of this type of bank lending:

The part of the loans on stocks and bonds in which the largest current changes in volume occur represents credit used by brokers and dealers in bonds and other securities. The borrowings by brokers in New York City are primarily for the purpose of carrying securities for account of customers located both in New York City and in other parts of the country. The dealers in securities include investment banking and issue houses which handle the bulk of the foreign and domestic securities floated in New York City and distributed throughout the country. The funds borrowed by these brokers and dealers are supplied by lenders, which include New York City banks, out-of-town banks for which the city banks serve as correspondents, and other institutions, firms, and individuals. The loans for out-of-town banks, especially when payable on demand, together with the balances held by New York City banks for correspondent banks, constitute a supply of out-of-town funds in New York which are subject to withdrawal, and changes in the total volume are an important indicator of conditions in the money market and of changes in the general credit situation.

The Federal Reserve Board has had weekly reports on bankers' balances from representative member banks in New York City since 1920, and since 1919 the weekly reporting banks have given the amount of their loans on stocks and bonds.

The increase during the year 1925 in the demand for loans secured by stocks and bonds, including both loans to brokers and to other borrowers, was an important factor in the advance of money rates during 1925, particularly at the financial centers. Money rates, which had in the late summer of 1924 been at exceptionally low levels, rose considerably from that time until the end of 1925. . . .

The advance in money rates in financial centers after the middle of 1925 reflected an increase in demand for loans . . . . usually required for the purpose of moving crops and financing autumn trade.—[Federal Reserve Bulletin, February, 1926, pp. 74-75.]

Note: The data for these loans on a weekly basis running back to October 1917 will be found in the Federal Reserve Bulletin, November 1926, pp. 779-786. These data should be studied by the student in the preparation of this problem.

LOANS TO BROKERS AND DEALERS, SECURED BY STOCKS AND BONDS, MADE BY BANKS REPORTING IN NEW YORK CITY

(000,000 omitted)

Last Reporting Day for Each Month	Demand and Time Loans				Demand Loans				Time Loans			
	Total	For Own Acc.	For Acc. of Out-of-town Banks	For Acc. of Others	Total	For Own Acc.	For Acc. of Out-of-town Banks	For Acc. of Others	Total	For Own Acc.	For Acc. of Out-of-town Banks	For Acc. of Others
1925	$	$	$	$	$	$	$	$	$	$	$	$
Jan. 28....	2,044	1,060	985	*	1,397	614	783	*	647	445	202	*
Feb. 25....	2,090	1,049	1,041	*	1,422	600	822	*	667	449	218	*
Mar. 25....	2,076	983	1,093	*	1,401	542	859	*	675	441	234	*
Apr. 29....	2,130	1,054	1,076	*	1,448	617	831	*	681	437	245	*
May 27....	2,169	1,024	1,145	*	1,490	588	902	*	679	436	243	*
June 24....	2,237	1,063	1,175	*	1,535	610	925	*	702	452	250	*
July 29....	2,287	1,031	1,256	*	1,548	572	976	*	739	459	280	*
Aug. 26....	2,306	993	1,313	*	1,533	531	1,002	*	773	462	311	*
Sept. 20....	2,467	1,053	1,414	*	1,698	638	1,059	*	769	414	355	*
Oct. 28....	2,629	1,046	1,583	*	1,824	623	1,201	*	805	424	382	*
Nov. 25....	2,691	1,057	1,635	*	1,819	626	1,194	*	872	431	441	*
Dec. 30....	2,908	1,341	1,567	*	2,003	906	1,097	*	905	435	469	*
1926												
Jan. 27....	3,098	1,201	1,287	610	2,135	706	887	542	963	495	400	68
Feb. 24....	3,109	1,149	1,343	617	2,139	668	925	546	970	482	417	71
Mar. 31....	2,573	1,048	1,006	519	1,704	605	651	449	869	443	356	70
Apr. 28....	2,464	898	1,024	542	1,673	466	717	489	791	432	307	53
May 26....	2,432	893	965	573	1,728	521	692	515	703	372	273	58
June 30....	2,565	1,103	884	579	1,890	745	636	509	675	358	248	70
July 28....	2,602	934	1,015	653	1,938	588	761	589	664	346	254	64
Aug. 25....	2,731	942	1,073	717	2,044	622	776	646	688	319	297	71
Sept. 29....	2,813	1,010	1,112	691	2,095	691	783	621	718	319	329	70
Oct. 27....	2,602	801	1,051	751	1,883	494	721	669	719	307	330	82
Nov. 24....	2,608	839	1,031	739	1,916	542	721	653	693	296	310	86
Dec. 29....	2,788	1,008	1,022	758	2,109	722	714	673	679	287	307	85
1927												
Jan. 26....	2,732	865	1,126	741	2,048	566	823	659	684	299	303	82

* Data for 1925 and earlier years reported under two headings: "For Own Account" and "For Correspondents."

[Data for 1925, compiled from Federal Reserve Bulletin, November, 1926, pp. 785–6; for 1926–27. For Board's explanation of data for January, 1926, and following see Bulletin, March, 1926, pp. 97–99.]

(a) Draw a chart showing the totals beginning with January 1925 down to date. Recent data not given in this problem should be obtained from current issues of the Federal Reserve Bulletin. (b) Do you find a seasonal variation in your data? Explain. (c) How does the volume of funds loaned by the New York banks for their own account compare with those for out-of-town banks? for others? (d) Does the curve for "out-of-town" loans parallel that for "own account"? Explain. (e) At what season of the year do the out-of-town loans reach peak? Is that peak reached at the same time each year? Explain. (f) Why were these data not made available earlier?

235. Sterling Accounts of Foreign Banks with English Banks

. . . foreign banks engaged in foreign exchange transactions in foreign centers must keep sterling accounts with English banks. Foreign banks buy cheques drawn abroad on English banks, remit coupons of English companies held by foreign investors, and these and various other classes of items the English bank collects and credits to its account. Similarly a foreign bank sells drafts and cheques on its account, and when they are presented over the counter or through the clearing the English bank pays them (if they are in order) and debits them to the sterling account of the foreign bank.—[Minty, English Banking Methods, p. 404, Isaac Pitman & Sons, 2 W. 45th St., New York, by permission.]

(a) The department in the London Overseas branch of the English bank which undertakes the work of passing these items through the clearing and crediting the respective accounts is called the "cash department." Compare its work with that of the "waste department" of an ordinary branch. (b) If a check presented for collection is returned marked "N/A", what is meant? (c) Would the English bank sanction an overdraft in such accounts? (d) Do sterling accounts of foreign banks carry interest? if so, at what rate? (e) What group of these accounts is called "dribs"?

236. Bank of England's Use of Its Discount Rate

Mr. Birch, the late governor:

"In 1872-73 an enormous amount of bills were created with a view of withdrawing gold from England to assist in the payment of the French indemnity to Germany. The Bank recognised the danger which might arise from its being carried to too great an extent, and then crippling the ordinary business of the country, and rapidly raised the rate of discount. I find that in 1872 we had seventeen changes in our rates of discount; in 1873 we had twenty-four changes. The bank rate varied from 3 per cent to 9 per cent, and from 10 per cent to 12 per cent was charged in the latter period on advances, not with a view of making large profits, but with a view of telling people that it was a class of business the Bank would do everything in its power to keep within reasonable bounds."—[Easton, Banks and Banking, p. 132.]

(a) Why should the number of changes in rates increase rapidly in times of financial disturbance? (b) Why is it more possible for the Bank of England to control the gold flow by changing its discount rates when the chief countries are all on the gold standard than if some are on a paper standard, especially if they are on a depreciating paper standard? (c) When are gold embargoes necessary? (d) In October 1878 when the City of Glasgow Bank failure occurred, the Bank of England did not raise the bank rate above 6%, whereas, as shown above, the rate was raised to 12%: what difference of policy is here evident?

237. Competition of Bank of England with Other Banks

The Bank of England competes as little as possible with the joint stock banks: how are the following evidences of that policy?

(a) The small number of branches. [The Bank of England has ten, the Bank of France 600 branches: what difference of policy does this indicate?] (b) The Bank of England does not discount bills for the general public to any extent. [The Bank of France and the Reichsbank are powerful factors in the discount market: contrast the relations of these banks to the commercial banks with the English and the American system.] (c) The volume of notes outstanding is very small compared either with the issue of the central banks of France and Germany or with the deposits of the joint stock banks of England.

238. Effects of the Bank of England Rate on Money Rates over the World

(a) The English money market has historically been a cheap one for borrowers: what are the reasons for the relatively low rates here? (b) The bankers' deposit rate is usually 1½% below the Bank of England rate: why should the two move together? why by this margin? Under what conditions would deposits pile up in London banks even if the rate paid were only ½%? (c) A change in the Bank of England rate soon affects rates in the other great commercial markets, Paris, Berlin, Vienna, Amsterdam, and New York: if the Bank rate is raised in London, how does it affect exchange rates on these cities? why should the rates be then raised in these cities? (d) Bills of exchange on England are held by bankers in these cities for investment or speculation: if the Bank of England rate is raised how does it affect the London price of these bills? (e) How do changes in the Bank of England rate affect the volume of Stock Exchange speculation in London? If a broker buys a 4% stock, borrowing practically the cost of the stock at 2½% from one fortnightly settlement to another, what profit does he make? (f) Is the volume of new financing of securities now greater on the New York or the London market? Is London's money rate still dominant?

239. City Bank's Grant of Accommodation to Correspondent

The methods which are followed in the extension of accommodation to banks differ in important particulars from those followed in extending accommodation to mercantile houses. With the latter, borrowing is assumed to be only a natural and recurring operation. The general operations of the enterprise are considered, and on this basis the line of credit is extended. Borrowing by a bank, however, is in general not so regarded. Instead of viewing its transactions as a whole and on this basis determin-

ing the line of accommodation, it is desired rather to go back of the general operations and to consider the specific transactions which occur, to the extent at least of having the paper representing this transaction as collateral, and analyzing these bills receivable to some extent. In consequence no line of credit is in general fixed, but each individual case is considered on its merits, specific amount being granted as needed. The line of credit then is employed only in a somewhat restricted sense. The position which is assumed with respect to bank borrowing is well stated by one institution in the following words: "We avoid as far as possible suggesting lines or limits as to the extent we would serve the borrower, simply indicating our disposition to fully meet their reasonable requirements in liberal proportion to balance maintained and with due regard to amount of their capital investment and borrowings elsewhere, but quite frequently the borrowers suggest lines themselves which we agree to if circumstances warrant, conditioned on everything continuing satisfactorily." One institution, however, regularly fixes lines for its bank borrowers as well as for its mercantile accounts, while another quite frequently fixes lines in the case of banks, especially southern, western and southwestern banks which are regularly in need of funds each year.

A leading institution states that when a State bank appears to be borrowing or rediscounting to an amount in excess of its capital and surplus it is generally made the subject of special consideration and enquiry. Another institution also states that it endeavors to limit accommodation to the capital investment, while in the case of a third bank the accommodation granted is always less than the capital. With another bank, the line granted is limited to the capital, but due regard is given a large surplus and profits item. The amount of accommodation, of course, varies with the type of paper offered, and would not be on the same basis for an institution offering paper ineligible for rediscount as for one offering eligible paper. Several institutions state that with respect to rediscounts with the Federal Reserve Bank, they go on the presumption that the paper rediscounted is probably of such good quality that the contingent liability of the bank endorsing the same is negligible, and hence disregard this item when considering the accommodation to be extended.—[Federal Reserve Bulletin, June 1920, pp. 584-585.]

(a) Why do large city banks not fix a definite "line of credit" for their correspondent banks as they do in the case of their borrowing customers? (b) Explain the difference in the security or protection requirements. (c) Why do some city banks require a certain relation between the volume of loans and the borrowing bank's capital and surplus? (d) Outline the sources of credit information for a large city bank when it is checking up a correspondent bank. (e) State the general requirements as regards balances to be maintained by the out-of-town correspondent bank.

240. Borrowing from Federal Reserve Banks by Reporting Member Banks in Leading Cities

The following table gives the amount of borrowing from federal reserve banks by reporting banks in certain leading cities:

(000,000 omitted)

	Total	Secured by U. S. Government Obligations	Otherwise Secured and Unsecured
Yearly average (Based on weekly figures)			
1921	$1,261	$494	$767
1922	254	121	133
1923	475	268	207
1924	167	83	84
1925	302	181	121
1926	309	181	128
Average for week ending:			
Jan. 28, 1925	129	197	32
Feb. 25	289	217	72
Mar. 25	218	138	80
Apr. 29	211	127	84
May 27	218	129	89
June 24	255	169	86
July 29	260	172	88
Aug. 26	370	232	138
Sept. 30	444	236	208
Oct. 28	403	209	194
Nov. 25	427	253	174
Dec. 30	555	371	184
Jan. 27, 1926	270	169	101
Feb. 24	363	224	139
Mar. 24	419	253	166
Apr. 28	305	191	114
May 26	257	142	115
June 30	288	160	128
July 28	294	178	116
Aug. 25	349	202	147
Sept. 29	495	275	220
Oct. 27	438	241	197
Nov. 24	432	252	180
Dec. 29	511	301	210
Jan. 26, 1927	197	114	83

[Annual Report of the Federal Reserve Board, 1925, The Federal Reserve Bulletin.]

(a) Draw a chart showing the variations on last report for each month in these borrowings during 1925, 1926 and 1927. [By reference to recent issues of the Federal Reserve Bulletin, students should bring data down to date.] (b) Do you find a seasonal variation in your data? Explain carefully and fully. (c) Study the data showing the annual average based on weekly figures. Has there been any tendency for these average amounts to increase year by year? Why? (d) Why should the amount for 1921 be so much larger than for other years? Why was 1923 larger than 1924 or 1925?

241. Interdistrict Accommodation of Federal Reserve Banks During 1918 to 1921, Inclusive

Section 11, paragraph (b) of the Federal Reserve Act provides:

(b) To permit, or, on the affirmative vote of at least five members of the Reserve Board to require Federal reserve banks to rediscount the discounted paper of other Federal reserve banks at rates of interest to be fixed by the Federal Reserve Board.

During the years 1918 to 1921, inclusive, conditions made it necessary for several federal reserve banks to seek help from other banks. The total volume of such interbank accommodation is shown in the following table:

REDISCOUNTS AND SALES OF DISCOUNTED AND PURCHASED BETWEEN FEDERAL RESERVE BANKS, DURING 1918 TO 1921, INCLUSIVE

(000 omitted)

	1918		1919		1920		1921	
	Redisc. or Sold by	Disc. or Purchased by	Redisc. or Sold by	Disc. or Purchased by	Redisc. or Sold by	Disc. or Purchased by	Redisc. or Sold by	Disc. or Purchased by
	$	$	$	$	$	$	$	$
Boston	120,297	19,898	131,165	.....	20,846	1,000,527	.....	204,150
New York	180,901	67,681	317,740	55,827	522,215	490,648	.....	595,500
Philadelphia	50,149	66,365	826,521	.....	371,600	179,728	.....	5,000
Cleveland	.....	137,115	.....	284,317	50	1,478,882	.....	194,503
Richmond	69,063	331	842,946	5,080	700,000	.....	500,000	.....
Atlanta	80,293	2,514	82,690	10,065	307,997	57,087	67,145	.....
Chicago	9,984	200,398	124	1,423,815	283,178	173,590	.....	.....
St. Louis	12,500	9,051	.....	180,529	315,499	13,000	.....	.....
Minneapolis	24,996	99,462	78	447,895	293,500	40,029	117,000	.....
Kansas City	8,530	25,047	56,500	50,099	411,636	25,049	9,008	.....
Dallas	103,025	8,242	404,975	67,577	436,013	143,000	306,000	.....
San Francisco	.....	24,534	515	133,050	10,258	71,222	.....	.....
	660,638	660,638	2,658,254	2,658,254	3,672,792	3,672,792	999,153	999,153

[Compiled from Reports of Federal Reserve Board.]

(a) Prepare a chart showing the trend of total discounts and purchased bills and of the total reserves of federal reserve banks, or the reserve percentage of federal reserve banks. (b) How do you account for the gradual increase in the total amounts until the end of 1920, and then, the decline of 1921? (c) Study the annual reports of the Board. Prepare a table showing the assistance received by each federal reserve bank. (d) Which federal reserve banks were the largest and most consistent borrowers? How do you explain this?

242. Open Market Investment Committee

How are the Purchases and Sales Constituting Open-Market Operations Made?

For a considerable period, each Federal reserve bank conducted its own purchases and sales, though there has always been a great degree of co-operation among Federal reserve banks, purchases and sales being made freely for each other upon request; and there was necessarily a high degree of co-operation in the efforts made by the Federal reserve banks to develop an open market. Since New York is the largest market, however, both for acceptances and for United States Government securities, it is in New York that most of the open-market operations of the Federal reserve banks have always been conducted. In making sales and purchases in the open market, both for its own account and for account of other Federal reserve banks, the Federal Reserve Bank of New York acts under the direction of the Open Market Investment Committee. This Committee was established in 1923 and consists of operating officials of the reserve banks acting under the general supervision of the Federal Reserve Board.—[Questions and Answers on the Federal Reserve System, published by the Federal Reserve Bank of Richmond, 1926, p. 82.]

The part that open-market operations may play in general credit policy is influenced by the fact that changes in the volume of securities held by the reserve banks have an effect on the volume of their discounts for member banks. The purchase of securities in the open market by a Federal reserve bank places funds in the hands of member banks which these banks may use in the repayment of borrowings from the reserve banks; the sale of securities, on the other hand, by withdrawing funds from the market may lead to additional borrowing from the reserve banks. The difference between discount operations and open-market operations is that the initiative in re-discounting lies with the member banks, while in the purchase and sale of securities the initiative may be taken by the reserve banks. The extent to which member banks borrow in order to replace the funds withdrawn by the reserve banks through the sale of securities is a measure of the demand for reserve bank credit. The sale of securities by a reserve bank may thus serve as a test of the degree of adjustment between the demand for reserve bank credit and the outstanding volume of such credit.—[Report, Federal Reserve Board, 1923, pp. 13-14.]

(a) Why did the federal reserve banks find it advisable to adopt this policy? (b) Why should this policy prove to be more efficient than to have the banks act independently of each other? (c) Under what conditions should the federal reserve banks be operating in the open market? Why? (d) How are open market operations of federal reserve banks likely to influence the policy and operation of member banks? Why?

243. Line of Credit Established by Federal Reserve Bank Under Phelan Act of 1920

Following the passage of the so-called Phelan Bill in 1920, the Federal Reserve Bank of Kansas City passed the following resolution:

That effective Saturday, April 17, 1920, whenever the executive com-

mittee of this bank shall approve advances to a member bank on member bank notes or rediscounts, in an amount greater than its basic amount, such advances shall be subject to an increasing discount rate, applicable to paper of all maturities, based upon a differential of one-half of 1 per cent, as follows:

One-half of 1 per cent above normal rate on accommodations extended above the normal basic line up to and including 25 per cent of each basic amount.

One per cent above normal rate for the next subsequent sum equal to 25 per cent of the basic amount.

One and one-half per cent above the normal rate for the next subsequent sum equal to 25 per cent of the basic amount.

And so on at an increasing rate of one-half of 1 per cent for each unit of 25 per cent additional; i. e., the normal rate shall apply on paper discounted for a member bank in an amount equivalent to its basic line, but thereafter the rate shall increase progressively one-half of 1 per cent on each subsequent sum advanced equal to 25 per cent, or fraction thereof, of the basic amount of the applying member bank.

Provided, however, That while the borrowings of member banks secured by Government war obligations shall be considered as a part of the sum constituting the normal basic amount, or any amounts in excess thereof, the progressive rates shall not apply to member bank notes secured by Treasury certificates of indebtedness, Liberty bonds, or Victory notes actually owned by borrowing member banks on April 1, 1920.

Provided further, That the progressive rate shall not attach to the paper now under discount, but new offerings, other than those secured by Liberty bonds, Victory notes, and certificates, shall be subject to the progressive discount rates, to be based upon the then liability of the offering member.—[Federal Reserve Bulletin, May 1920, p. 449.]

(a) What economic and financial conditions brought about the adoption of such a bill? (b) How many federal reserve banks finally tried this law? (c) Take the statement of a concrete bank and determine the total amount such member bank could secure from the federal reserve bank? Under what conditions would the maximum interest rate be paid? The average rate paid? (d) What factors should determine the volume of credit one bank should receive from other banks?

244. Discount Operations of the Federal Reserve Banks by States

The following table shows the number of member banks, number of member banks accommodated, and amount of paper discounted by the federal reserve banks for certain states for the period 1923 to 1926, inclusive.

Data for Problem 244

	Number of Member Banks on Dec. 31[1]				Number Accommodated During				Total Amount of Paper Discounted (000,000 omitted)			
	1926	1925	1924	1923	1926	1925	1924	1923	1926	1925	1924	1923
									$	$	$	$
United States	9,260	9,489	9,682	9,896	5,343	5,183	6,060	6,333	37,682,137	32,562,620	15,419,155	38,379,926
Massachusetts	181	181	182	183	135	146	148	153	2,557,919	1,872,751	645,969	3,395,562
New York	655	636	632	620	429	438	436	433	16,288,428	16,522,907	6,653,107	17,408,097
New Jersey	354	333	313	299	247	235	221	220	1,099,779	699,684	528,775	738,692
Pennsylvania	970	958	953	939	613	509	592	587	4,774,943	3,843,936	1,888,144	4,118,888
Ohio	430	441	447	456	276	285	281	282	1,099,125	1,083,257	489,691	933,910
Illinois	577	589	583	591	321	311	342	335	1,385,029	888,176	402,748	1,328,285
Michigan	291	290	286	284	174	161	177	185	1,213,003	945,034	378,601	783,676
Missouri	199	198	192	192	108	110	123	121	1,079,595	426,014	279,964	1,118,523
Maryland	89	89	91	94	54	54	58	62	517,286	410,487	160,308	485,142
District of Columbia	13	13	15	15	10	9	11	12	177,171	126,566	105,456	613,041
Virginia	182	193	196	195	143	146	155	146	1,079,021	785,602	507,935	1,235,751
North Carolina	88	91	95	97	75	78	80	87	718,093	733,970	308,177	358,458
Kentucky	147	146	147	149	60	67	75	71	539,936	250,809	186,961	746,537
Louisiana	44	46	47	50	28	35	41	40	324,753	228,025	194,608	275,523
Texas	763	779	751	754	417	309	415	523	211,510	114,191	131,290	267,971
California	299	300	300	319	134	138	159	161	2,099,266	1,827,435	693,935	1,710,698

[1] The figures for 1925 and 1926 represent the number of member banks in actual operation; those for 1924 and 1923 the number shown by the capital stock records of the Federal reserve banks.

[Thirteenth Annual Report of the Federal Reserve Board, 1926, pp. 90–1.]

(a) Taking the United States as a whole, account for the decline in number of members and the number of member banks accommodated from 1923 to 1925. Compare with New York and New Jersey. (b) The total amounts discounted did not follow the same uniform trend. Account for the large decline in 1924 as compared with either, or both, 1923 and 1925. (c) Study the figures for the different states. Do you find the same trend for each state as shown for the United States? (d) What per cent of the total number of member banks discounted in each of these years? Account for the fact that fewer banks discounted in 1925 than in 1924, yet the total for 1925 was more than twice what it was in 1924.

245. Support of Federal Reserve Bank of New York to Bank of England

The Federal Reserve Bank of New York in its Annual Report for 1925 contained the following statement regarding the aid which had been extended by *all* federal reserve banks to the Bank of England in connection with England's return to gold payments:

In April 1925, this bank, in association with all other Federal Reserve Banks, entered into an agreement to place $200,000,000 of gold at the disposal of the Bank of England for a period of two years, in connection with England's return to gold payments. The exact provisions of the arrangement were described as follows in the Federal Reserve Bulletin for June 1925:

"Under its arrangement with the Bank of England the Federal Reserve Bank of New York undertakes to sell gold on credit to the Bank of England from time to time during the next two years, but not to exceed $200,000,000 outstanding at any one time. The credit is to bear interest to the extent that it is actually used at a rate 1 per cent. above the New York Reserve Bank's discount rate, with a minimum of 4 per cent. and a maximum of 6 per cent, or, if the Federal Reserve discount rate exceeds 6 per cent, then at the rediscount rate of the bank. . . . Upon the purchase of gold the Bank of England will place on its books to the credit of the Federal Reserve Bank of New York an equivalent deposit in pounds sterling. This deposit may be used from time to time by arrangement with the Bank of England in the purchase of eligible sterling commercial bills which shall be guaranteed by the Bank of England, and in that case discount earned on the bills will be applied to the payment of interest.

"If occasion arises for the use of this credit, support can be given to sterling exchange either through the purchase of sterling bills in New York or abroad, or gold can be shipped to other countries on British account. Thus the Bank of England could meet a foreign demand for gold without reducing its own reserves, or it could replenish its reserves by withdrawing gold from this country or by earmarking it in New York. The form in which the credit would be used would depend upon the circumstances at the time."

The repayment, within a period of two years, of such portion of the

credit as may be used by the Bank of England is guaranteed by the British Treasury under the terms of the Gold Standard Act passed by Parliament early in May 1925. This guarantee protects the Federal Reserve Banks against any governmental act which might operate to restrain the Bank of England from meeting its obligation, by the shipment of gold or otherwise. The transaction, however, is not with the British Government, but is solely with the Bank of England. In this respect it differs from the contemporaneous 100 million dollar credit which Messrs. J. P. Morgan & Company arranged for the British Government with commercial banks in the United States, which is solely a Government credit.

The arrangements between the Bank of England and the Federal Reserve Bank of New York involve no commitment as to the policies to be pursued by this bank in dealing with domestic credit conditions. While it is the intention of this bank to exchange information fully with the Bank of England and to avoid any unnecessary action which would be detrimental to the maintenance of a free gold market, the Federal Reserve Bank of New York and the Bank of England are both absolutely free and uncommitted as to any action whatever relative to discount rates.—[Eleventh Annual Report, Federal Reserve Bank of New York, pp. 9-11.]

NOTE: Students *should* read the comments made at or near that time in the Federal Reserve Bulletin, *Commercial and Financial Chronicle,* and New York *Journal of Commerce.*

(a) When did England return to the gold standard? Was this a complete restoration of the gold standard? Explain. (b) What was the purpose of these large credits? What security did the federal reserve bank and J. P. Morgan & Company receive from the Bank of England? (c) What was the attitude of the press toward the participation of the federal reserve banks in the credit extended? Was this reaction based on the economic or legal aspects of the question? (d) How were these credits to be advanced? What influence were they expected to have, if used?

CHAPTER X

FINANCING THE BUSINESS MAN

246. Mercantile Credit and Sales Terms

(a) Explain the following sales terms:

1. C. O. D.
2. C. B. D.
3. Cash discount
4. 2% 10 days, net 30 days
5. Dating
6. 2% 10 days, net 30 days, 60 days extra
7. Season dating
8. 7/10/60 extra terms
9. E. O. M.
10. R. O. G.

(b) A bill of dry goods amounting to $914.37 is sold August 19, on the following terms: "2/10,1/30,n/60." How much would settle the bill September 18? How much August 27? If money lends in the market at 6% during this period, which is the most favorable term of settlement? Calculate each term to present value at that rate.

247. Objections to the Open Book Account

The following statement gives a criticism made against the open account by a strong advocate of the trade acceptance:

To our thinking, there could be nothing much more illogical than the open book account. It does not belong to the realm of exact and scientific accounting. It is an accommodation for the buyer, we admit, because under the old-fashioned, easy, lax system, he could settle when he pleased. But business in these days does not take kindly to old-fashioned, lax methods.

The modern bank is always in balance, or it should be if it is a good bank. It closes its books every night, and knows just where it stands, and every dollar that it has out is callable on demand, or it falls due at a certain date. There is absolutely no reason why a commercial house should not do its business in the same exact way in which the bank does its business. It is the only safe way for a bank, and it is far the safest way for a commercial house.

Our own experience in attempting to enforce the rule that every debt should be evidenced by a piece of paper, fixing the terms of that debt, has been attended by such admirable results that we believe the rule should have absolutely general application, and that no man should attempt to buy or to sell commodities on time unless a trade acceptance closes the transaction when shipment is made.—[James A. Green, Trade Acceptance Experiences, New York City, 1920, p. 8.]

(a) Criticize the thought expressed in the first paragraph. (b) Is it fair to compare a commercial bank with a commercial firm as was done in the second paragraph? (c) Do you accept the conclusion reached in the last paragraph? Why?

248. Trade Acceptance Experience

One advocate of the use of the trade acceptance as a means of assisting in the financing of a business made the following statement:

It was during the beginning of the great expansion in business that we adopted the trade acceptance. Prices of iron jumped over night from approximately $16 per ton to almost $50. It required three times as much capital to do business satisfactorily during the war as it required to do business before the war. Had it not been for ample and generous banking facilities—and our case was probably typical of thousands of other business houses—we would have found our own cash resources quite inadequate to meet the situation. As it was, we found that we had in open book accounts four or five times as much money due us as we had ever had due us at any time previously; and in order to swing our trade and keep our own credit good, discounting our own bills and meeting all payments on their due dates, we were owing banks, not a sum of money out of proportion to the money due us, but an amount which was much larger than our capital, and which, four or five years ago, would have seemed impossibly large.

This was our situation when we adopted the trade acceptance. The results were absolutely miraculous. In less than four months' time we had reduced our open book accounts to a comparatively small figure; we had paid every dollar of indebtedness due the banks, and more than that we were carrying a large cash balance, and in addition, had trade acceptances in our safe which we called a cash reserve, because it could be instantly converted into cash. These trade acceptances ran into large figures.

The Banker's Attitude

The first time we brought him a little bunch of trade acceptances, he looked at them curiously, studied them with considerable care, read them on the face, and then turned them over and looked at them on the back; then, with a sudden burst of sunshine, remarked:

"Why don't you bring me more of these? This is the kind of stuff I want you to bring me in bushel baskets."

That settled it for us. We knew if the trade acceptance was good enough to have a banker ask for them in bushel baskets they were good enough for us. The trade acceptance transformed the ..... from a debtor nation to a creditor nation, so to speak.—[James A. Green, Trade Acceptance Experiences, New York City, 1920, pp. 3-5.]

(a) Why should it require three times as much capital to do business during than before the war? Was this due to the fact that longer terms were used or more credit extended on open book account, or both? (b) Does a commercial bank supply capital? If so, where

does the capital come from? (c) How did the use of trade acceptances enable this firm to reduce their bank loans so extensively? Did they assume any other liability? (d) Would the selling of goods on the trade acceptance basis improve the credit standing of a wholesale merchant more than selling on open account?

249. The Use of the Trade Acceptance in Financing Cotton

The Mississippi Cotton Company of New Orleans sold the Fall River Cotton Manufacturing Company cotton amounting to $50,000. The cotton was to be shipped by rail to Boston, Mass. The Mississippi Cotton Company shipped the cotton and forwarded the B/L with 90-day sight draft on the buyer attached, through the First National Bank, New Orleans, to the Boston National Bank, with instructions to release shipping documents on acceptance of the draft by the Fall River Manufacturing Company.

(a) Draw up the draft which you would attach to the B/L and show across the face the proper acceptance. (b) Explain in detail the presentation of the draft for acceptance, tracing it from the time the seller draws it up till actually accepted. (c) Explain the different methods by which the cotton dealer can secure the funds before the draft matures. (d) What provision should have been made for final payment of this draft at maturity? Who finances this transaction? (e) Is this a legitimate use of the trade acceptance? What is meant by saying "the trade acceptance should represent a live commercial transaction"?

250. The Advisability of the Business Man Borrowing from Commercial Banks

The manager of the X Shoe Company, when asked to what extent he relied upon banks for funds to tide him over the peak of the year, replied that he depended on his own funds by keeping on hand more funds than he needed in his business, except at seasonal periods. He added that he invested his surplus funds when not actually needed in his business in short-term liquid commercial paper at 4 to 4½%.

(a) What other plan would you suggest for him in order to increase his profits? (b) If such a policy were adopted extensively how would it affect production in general? (c) How would such a policy affect the interest rate on short-term commercial paper if a large percentage of all business men decided to rely upon their own capital, investing their idle funds at odd times? (d) How would it affect the volume of commercial paper offered in the market? (e) What would be the bank's attitude toward a request for assistance from this concern

if it so happened that it needed bank funds during a financial depression or panic?

251. Banks Acting as Insurance Agents, as Brokers and Agents Making Loans or Procuring Loans on Real Estate

An amendment to the Federal Reserve Act approved September 7, 1916, provides:

That in addition to the powers now vested by law in national banking associations organized under the laws of the United States any such association located and doing business in any place the population of which does not exceed five thousand inhabitants, as shown by the last preceding decennial census, may, under such rules and regulations as may be prescribed by the Comptroller of the Currency, act as the agent for any fire, life, or other insurance company authorized by the authorities of the State in which said bank is located to do business in said State, by soliciting and selling insurance and collecting premiums on policies issued by such company; and may receive for services so rendered such fees or commissions as may be agreed upon between the said association and the insurance company for which it may act as agent; and may also act as the broker or agent for others in making or procuring loans on real estate located within one hundred miles of the place in which said bank may be located, receiving for such services a reasonable fee or commission: *Provided, however,* That no such bank shall in any case guarantee either the principal or interest of any such loans or assume or guarantee the payment of any premium on insurance policies issued through its agency by its principal: *And provided further,* That the bank shall not guarantee the truth of any statement made by an assured in filing his application for insurance.

Certificates Covering Insurance Agency

National Banks Desiring to Act as Agency for Insurance Companies

....., 192..

The Comptroller of the Currency,
Washington, D. C.

Sir: The .... (title and location of bank) being located in a town the population of which does not exceed 5,000, as shown by the last preceding decennial census, desires to act as agent for the ..... Insurance Company, under authority of section 13 of the Federal reserve act, as amended September 7, 1916.

Therefore, we, directors and officers of this bank, in conformity with the rules prescribed by the Comptroller of the Currency, certify that the following is a true and complete copy of resolution adopted by the directors at a meeting held ..... and spread upon the minutes:

"Be it resolved, That the contract of agency entered into on ....., 192.., between the ..... Insurance Company and the ..... National Bank of ....., by ....., president (or vice president) and .....,

cashier, a copy of which is on file in this bank, is hereby ratified and approved."

Respectfully,

(SEAL OF BANK)

.....
President or Vice-President
.....
Cashier
.....
.....
.....
Directors
(A majority must sign)

(A certificate must be furnished to this office in connection with each insurance company for which the bank will act as agent.)

[Instructions of Comptroller of the Currency Relative to the Organization and Powers of National Banks, 1923, p. 121.]

(a) Outline the necessary steps which must be taken by a national bank which wishes to become an insurance agent. (b) What functions may such agent perform in that capacity? (c) Are these true commercial banking functions? (d) Why were these privileges granted to national banks? (e) To what extent have national banks availed themselves of this privilege? (f) Why should banks in places the population of which does not exceed 5,000 (as shown by the last preceding decennial census) be allowed to carry on these functions whereas it is denied banks located in cities with a population of over 5,000?

252. Valuation of Assets

(a) Distinguish between the following kinds of value:

1. Cost value
2. Market value
3. Sales price value
4. Reproduction cost value
5. Scrap, salvage, junk, or break-up value
6. Service value
7. Present or depreciated value
8. Tangible or physical value
9. Intangible value
10. Earning value or earnings-capitalized value
11. Liquidation or forced-sale value

253. Valuation of Assets—Depreciation

Definition of depreciation: (1) "Loss in value which has occurred arising from the period during which the property of the undertaking has been in service."—[Hayes] (2) "Exhaustion of capacity for service," "lessening in cost value," "lessening in worth of physical property."—[Interstate Commerce Commission.] (3) "Expired capital outlay."—[Leake]

Causes of depreciation: [Matheson, Depreciation of Factories, 36-41.]

1. Wear and tear
2. Tenure of holding
3. Permanency or steadiness of industry
4. Exhaustion of raw materials
5. Obsolescence due to new inventions, new product, or better ways to make the same product
6. Vicissitudes and catastrophes not insurable
7. Fluctuations in trade
8. Inadequacy

(a) Show how each of the eight factors which are named above, causes depreciation. Give some rule for determining the proper allowance for depreciation caused by each. (b) How does depreciation differ from repairs? from maintenance? (c) What is the difference between "reserve for depreciation" and "depreciation fund"? Why does the Interstate Commerce Commission not allow the use of depreciation funds in railroad accounting, in general? (d) Explain briefly the principle and method of calculating the periodic depreciation charge in evaluating assets, by the (1) straight-line method, (2) working-hours or unit-product method, (3) sum-of-digits method, (4) sinking-fund method, (5) annuity method, (6) fixed percentage of diminishing value method. What are the good and bad points of each method?

254. Usance of Trade Paper

(a) What determines the proper usance of trade paper in the following lines: (1) the purchase of farm implements? (2) the exportation of shoes to South Africa? (3) the domestic shipment of meats from packers to jobbers? (4) the sale of millinery by jobber to retailer? (b) How are the terms of sale, such as 2% 10 days, net 60 days, affected in times of a sellers' market? of a buyers' market? of rising price level? of falling price level? of tight money market? (c) Do note brokers prefer long-term or short-term paper for sale?

255. Estimating Amount of Working Capital Required

The factors to be considered in estimating working capital requirements for a manufacturing business are:

1. Amount and cost of raw material
2. Labor cost
3. Overhead
4. Length of time occupied by manufacturing process
5. Rate of turnover
6. Terms of purchase and sale
7. Ease with which various kinds of working assets may be converted into cash
8. Seasonal variations

[Saliers, Accountants' Handbook, p. 815.]

(a) Show how each of the above factors influences the amount of working capital required. (b) What is meant by "current ratio," or "bankers' ratio"? Does this guide the amount of working capital required? (c) What is the effect on working capital requirements of the recent growth of installment selling? Are commercial banks supplying the extra capital? Is it reducing the safety of the banking situation?

256. Commercial Settlements

A, a retail merchant, buys 1,000 yards of cloth of B, a jobber, the terms being $5,000 on 90 days' time or $4,925 cash.

(a) Describe four different forms of "commercial paper" which might result from this transaction (illustrating each document, if possible, with a rough diagram). (b) Which of these documents would be eligible for rediscount at a federal reserve bank? (c) Select one of these documents and tell in detail its complete history from its origin to its payment, including its rediscount at a federal reserve bank and the issue of federal reserve notes against it.

257. Valuation of Accounts Receivable—Estimation of Bad Debts

(a) Is a reasonable allowance for bad debts a legitimate business expense? (b) What determines what is a "reasonable allowance"? How is it related to credit policy? with the efficiency of the credit department? with the line of business? with the "normal credit period"? (c) Three bases of estimating bad debts, in each of which the amount is expressed as a percentage, are: (1) amount of outstanding trade debts at date of balance sheet, (2) amount of sales on credit made during present fiscal period, (3) total sales for period. Under what conditions is it legitimate to use trade debts, credit sales, and total sales, respectively, for the base?

258. Working Capital Required

You are called in by a Typewriter Company, selling upon the installment plan, to compute the amount of working capital to be required for the year 1924.

Your examination discloses the following facts: The retail price of the machine is $100; the cost of material is 40% of cost of sales; and the direct labor is 35% of the cost of sales. Burden does not include selling, administration, or collection expense and loss. Selling expense is 12% of sales, administration expense is 5% of sales; collection expense and loss is an additional 3% of sales. You also find that future labor cost will increase 14 2/7%, which will decrease profit 35%.

Terms of sales are: $10 with order and balance in nine equal install-

ments. Estimated sales, first month fifty machines, with increase of 50 machines sold each month up to fourth month, when 200 machines were sold, with further increase during year.

Assume all expense must be paid during month in which sale is made. Prepare schedule showing all essential facts, and amount of working capital needed monthly.—[C. P. A., Wisconsin.]

259. Sales Terms in Fresh, Cured, and Canned Meats

Distinction in terms in the industry is made largely according to character of product, rather than according to character of purchaser.

Fresh meats are usually sold on a weekly basis, collection for all deliveries during a given week being made in certain cases by a specified day of the following week. Instances of the employment of terms of from 10 days to 30 days have also been found, the deviations from the regular terms occurring principally as a result of competitive conditions. It is estimated that at the present time about 90% of the fresh meats marketed in the United States is sold direct to retail dealers from branch houses and packer representatives. The weekly terms apply in large measure to the general purchases of the retailer.

Cured meats, however, are sold to considerable extent on 30-day terms. Dry salt, dry smoked, and sweet pickled meats are almost universally sold on strictly net terms, whereas sugar-cured meats, that is, hams and bacon, are subject in some cases to a cash discount of ½% for payment within 10 days, although in practice buyers seldom take advantage of the discount. The latter terms obtain also for lard. Cured meats are largely sold direct, as are fresh meats, except in some country districts where the volume of business is small and meats are sold to wholesale grocers who in turn sell to retailers.

Canned meats are sold largely upon the same terms as lard, although several instances of greater discount, such as 1%, have been reported. In some of the remote country districts considerable reliance is placed upon wholesale grocers for their distribution, whereas in other districts sales are mostly direct to the retailer, estimates placing the volume of such business at about 80% of the total.—[W. H. Steiner, Federal Reserve Bulletin, October 1919, p. 1129.]

(a) Why should the sales terms vary, as they do, with the character of the meat product? (b) Why are terms short in the fresh meat trade? How do the packers finance themselves, in order to carry the retailers a week?

260. Sectional Variations in Terms in Wholesale Grocery Trade

Greater standardization of terms prevails in the Middle West and West not only because of the progressive character of wholesale grocers in such localities but also because of the fact that whereas in some of the other markets, such as New York and Chicago, there are manufacturing jobbers who do to a great extent a national and semi-national business, and traders

who sell staple goods practically for cash at cut prices, in addition to houses which do the usual wholesale grocery business. In the sections mentioned houses are more or less generally of the last type. In these sections, moreover, less competition is experienced from exclusive tea and coffee and other specialty jobbers than in the more thickly populated territories.—[W. H. Steiner, Federal Reserve Bulletin, December 1919, p. 1135.]

(a) Develop this explanation of the differences, as between sections, in sales terms in the grocery trade. (b) Is the present tendency in the United States toward or away from standardization of sales terms? (c) What relation obtains between the phases of the business cycle and variety of sales terms? (d) During the war credit terms were tightened, discounts being dropped, and terms shortened to cash basis. But in the aftermath of the war the 30-day terms were revived. What relation obtains between the terms granted and the condition of the market, i.e., buyers' market or sellers' market? (e) Why in times of great uncertainty, such as prevailed during the war in industry, is it desirable to have shorter sales terms?

261. Sectional Variations in Sales Terms of Jobbers of Hardware

To consider briefly now the actual terms in use in the several sections of the country. General employment of other than the regular terms is always found in certain markets. At the present time a 2% discount is regularly given, even on items upon which the manufacturer allows only a lesser discount, with the exception, of course, of distinct lines, such as metals and heavy hardware. In certain sections where the net terms are 60 days, some jobbers have adopted 30 days; for example, in New York State and eastern Pennsylvania. In 1918 it was stated that terms in Texas, outside of the Dallas district, had been reduced to 30 days. Recent advices, however, state that only about one-third of the houses in the State, in particular those stocking principally heavy goods, at the present time sell on terms other than the regular 2% 10 days, net 60 days. There was also stated to be a general tendency to shorten terms in the South, but that it was hindered by the fact that the large middle western centers, such as Chicago, St. Louis, and Louisville, continued on the 60-day basis. At the present time the majority of the southern jobbers still use the latter terms, which are customary also in various other large eastern and middle western markets, such as Cleveland, Pittsburgh, Detroit, Duluth, Kansas City, Omaha, Sioux City, Des Moines, and Denver, and on the Pacific coast.—[W. H. Steiner, Federal Reserve Bulletin, February 1920, p. 153.]

(a) Name any economic or social differences in the sections that help to explain the differences in the prevailing sales terms. (b) What difficulties are indicated in this paragraph in harmonizing sales terms in the different sections?

262. Sales Terms of Electrical Products

The products of the industry may be classified into the following five groups, according to the cash discount allowed. These discounts are quoted both by manufacturers and by jobbers to all their customers.

1. No cash discount, net 30 days: Telephone lead covered cable. Poles. Power motors and fans. Transformers. Railway supplies. Telephone apparatus. Testing instruments. Meters. High-tension insulators. Washing machines. Sewing machines. Vacuum cleaners. Dish washers. Arc lamps.

2. One-half per cent, 10 days: Annunciator wire. Rare copper wire. Magnet wire. Damp-proof wire. Weatherproof wire.

3. One per cent, 10 days: Cross arms. Lamp cord. Rubber covered wire. Lead covered wire. Line hardware.

4. Two per cent, 10 days: Heating material. Condulets. Dry batteries. Storage batteries. General supplies. Porcelain (except high tension). Sockets and receptacles. Snap and push buttons. Klaxon horns. Hughes ranges. Ironing machines. Incandescent lamps.

5. Five per cent, 10 days: Condulet outlet boxes and covers. Flexible metallic conduit conductors and fittings. Rigid iron conduit.—[W. H. Steiner, Federal Reserve Bulletin, March 1920, p. 264.]

(a) Can you discover rhyme or reason in these categories, accounting for the differences in sales terms? (b) Do these differences add to the work of the credit department of the dealers and manufacturers? of the banks? (c) What is the method by which these differences of sales terms might be reduced? (d) Are the differences accounted for by the differences in the methods of distribution? if so, what are these differences?

263. Methods of Finance Depend on Methods of Marketing

The raw material does not change hands many times from producer to consumer, the bulk of the wool used in the textiles being scoured (cleaned) at the mill. But the finished product, being a necessity of life finds its way into thousands of distributing channels before it reaches the final consumer, the wearer. The financial operations likewise become complex as the channels of distribution become numerous. The movement of wool is: Ranch (most generally) to Boston; Boston to mill, mill to cloth; cloth to jobber or commission merchant; jobber to retailer or clothing manufacturer; to wearer.

(a) Which pass through the greater number of successive middlemen (distributors), agricultural products or manufactured products? Give reasons. (b) Follow the wool from ranch to wearer and make note of the number of financial operations it occasions. Note the place where each financing is done. Note the type of credit instrument used in each. Note the debtor and creditor in each transaction. Is there any tendency to concentrate any of this financing in New York or Boston? (c) Do you find that the "financial operations become complex as the channels of distribution become numerous"? (d) Will the

development of "direct marketing" (producer to consumer direct) tend to simplify financing? to throw more of it onto New York or Boston?

264. Cotton Mill Financing

Another department of the factor's work consists of financing mills for which he may not be selling agent. Thus there are firms in New York which will discount accounts receivable. The operation is as follows: When a bill of goods is sold, the invoice is stamped "This bill assigned to A. B. and Co., to whom payment should be made." Upon so assigning the bill, the factor-banker will advance usually up to 80% of the amount, for which an interest charge is made. If the seller wishes the collection of the bill guaranteed, he will pay an additional sum as insurance premium for the surety of his money. The process simply means that the factor-banker buys the account, taking the risk of collection, for which he operates a well organized credit department.

If the full amount of the bill is at once desired, a further charge is made to cover the risk. It is a highly profitable line of credit operation. In some cases 6% is charged upon the advance made for the time to run and an extra charge for the balance; thus in case 80% was advanced at 6% on a hundred dollars, the charge would be $4.80 for a year. If the bill is to be guaranteed, a further charge of 6% flat on the balance is made, or $1.20.

(a) What does it mean to "discount accounts receivable"? Which is the more difficult operation, to discount a promissory note given by the jobber to the mill for goods bought, or to discount the account receivable which might otherwise represent the sale? Is it any more difficult to collect the account receivable than the note? (b) The trade acceptance and the trade bill are said to make credit more liquid than the account receivable: why? (c) Name some companies in the United States that discount accounts receivable for mills and jobbers?

265. Credit Employed by Farmers

(a) Where does the farmer get funds, and what credit instruments does he use, for the following operations: (1) buying his farm, (2) improving his land, (3) stocking his farm, (4) buying his seed, (5) buying agricultural machinery, (6) paying his harvest hands?

(b) What provisions have been made for rural credit under the following laws: (1) the Federal Reserve Act, (2) the Federal Intermediate Credit amendment, (3) the Federal Farm Loan Act, (4) the Federal Warehouse Act? (c) Has the government been negligent or dilatory in furnishing the farmer with credit facilities? Why was the federal reserve system, which caters more largely to commerce and industry, founded before the federal farm loan system and federal intermediate credit system, which cater to agriculture? Are there reasons why the government should give more attention to agricultural

credit than to mercantile and industrial credit facilities and foster their development?

266. Borrowing Customers of Banks in Agricultural Regions

(a) Consider the following types of customers of banks in small towns in agricultural regions, determine what are the characteristics which make each a desirable or an undesirable borrowing customer:

1. Agricultural cooperative associations
2. The local lumber, coal, elevator companies
3. The merchants
4. The cattle buyers and shippers
5. The farmers in the surrounding region
6. The poultry and egg buyer and shipper
7. The local creamery
8. The automobile agents
9. The town government
10. The renters of farms
11. The cattle feeding farmer
12. The truck gardeners

(b) What are the reasons why the bank should buy commercial paper and acceptances from the note brokers? (c) What are the reasons for investing a good amount in railroad, government, utility, industrial and other bonds? (d) If borrowers in the community complain that the bank should lend this money locally rather than invest it in these outside things, what should be the banker's answer? (e) Discuss the economics of the proposition that the borrowers of the community should have the previous refusal of the banks' loan funds before any is invested outside the community.

267. Cooperative Marketing Association as Customer of Agricultural Bank

Another problem has come into the banking business in agricultural districts and that is the farmers' cooperative organization formed to handle lumber and store and mill grain. These institutions are organized with a large number of stockholders, who appoint usually one or two of their stockholders as managers. They are all men of practically no knowledge or experience in the lines of business and too frequently run their business without fully knowing what they are doing and when calling on a bank for accommodation, seldom offer anything except a corporation note, as not many of the most responsible stockholders or directors will want to become responsible for all the stockholders, and it would be a physical impossibility to get a large number to endorse their loans, and these have frequently been classed as undesirable.—[Bulletin of National Association of Credit Men, October 1917, p. 964, courtesy Rodman Gilder, Editor, *Credit Monthly*.]

(a) Are these cooperative associations incorporated? Do they share profits? For what various purposes are they organized? In what parts of the United States are they most common? Are these regions plentifully supplied with banks? (b) In the mercantile and

industrial field it is common for the officers of the borrowing corporation to indorse the notes of the corporation: why is this done? why is it not readily done by the officers of the cooperative associations? (c) Do the cooperative associations provide limited liability for their members? Will a bank lend more or less freely to the association on this account? (d) What provisions of the Federal Intermediate Credit Act pertain to loans to cooperative associations? (e) Do cooperative marketing associations usually have capital stock? Why?

268. The Supply of Capital

There are five primary sources of capital: (1) Consumers' thrift. (2) Business savings. (3) "Direct capitalization." (4) Taxation for the liquidation of public debt or for the building of roads or other productive public works. (5) New bank credit.—[Chase Economic Bulletin, November 8, 1926, p. 22.]

(a) Explain how each results in increased capital. (b) A borrower at a bank gives his promissory note in exchange for bank notes or credit to his account: can this exchange of credits be creative of capital? (c) "The development of the modern stock market has changed the facts (since the time of Adam Smith) and has provided a safe machinery for using the funds of commercial banks directly or indirectly for many capital purposes, still keeping them liquid." Explain. (d) "The real estate market has developed no such liquidity and dependableness as has the stock market, and Adam Smith's reasons against the employment of bank funds in non-liquid capital uses still apply strongly against any considerable use of the funds of commercial banks in direct real estate loans." Is this distinction valid?

269. Cotton Mill Paper

In dealing with farmers, warehousemen, or shippers where cotton is involved banks always require receipts or ladings which represent the actual cotton, but with mills loans are seldom made with the cotton as security. This custom has come about because the mills are constantly manufacturing the staple into merchandise and after this is done of course it would be impossible to identify the cotton pledged as security. Fortunately practically all cotton mills are strong enough financially to borrow all the money necessary for their operation without pledging cotton as security. Inasmuch as bills sell their goods based on prices at which the raw material was purchased, there is very little chance of them losing money, except for lack of sufficient management. Mill paper is generally regarded very favorably and as it is usually liquidated within six months' time it is sought after for investment purposes.—[Bulletin of the National Association of Credit Men, October 1917, p. 952, courtesy Rodman Gilder, Editor.]

(a) What is the common relation of the ownership of the cotton mill and the mill agent (factor, or commission house) which sells

the product of the mill? How did this relationship develop? (b) How can a cotton mill in taking orders for say a million yards of cloth hedge against the changes of price of the raw cotton needed? Does this promote the credit title of the mill? (c) Exactly what is the character of the mill paper?

270. Meat Bills

Under the heading of "Meat Bills" it is usually customary to classify all such documentary bills as are drawn against shipments of packing-house products to firms and individuals abroad. Such bills are usually drawn for very short terms and in most cases the documents are surrendered against payment only. If drawn for longer periods, they seldom run to maturity, but are retired under rebate of interest for the unexpired time. On account of this feature "Meat Bills" are considered a very desirable form of remittance and command the very highest rates among banks who deal in exchange.

(a) Distinguish these meat bills from trade acceptances. (b) Why are they drawn for short term? (c) Why are they drawn "documents against payment"? (d) Why if drawn for longer term are they commonly retired under rebatement of interest? (e) What is the reason why bankers like short-term bills? What is the objection to them?

271. Cattle Paper

(a) Distinguish between "feeder loans," "stocker loans;" and "dairy loans." What differences are there in the risks attached to each type of loan? What is a "summer loan"? (b) What is a "cattle loan company"? Where are they chiefly located? Name some. (c) What is the advantage to a commercial bank in say Kansas City of having attached to it, through stock ownership or other device, a cattle loan company? What is the advantage of such attachment for the cattle loan company? (d) The credit analysis of the borrower by the cattle loan company includes: (1) his financial statement, (2) his brand sheet, (3) his personal character: what relative weight does it give to these items? (e) Cattle loan companies employ inspectors: what are their duties? (f) Where and how does the cattle loan company get its loan funds? What is meant by a "split loan"? (g) When loans are made to cattlemen, chattel mortgages are taken on the cattle: why? (h) Suppose that during the life of the loan by a cattle loan company the borrowing cattleman becomes careless with the cattle covered by the mortgage, or possibly he may find himself unable to finance the purchase of feed or to give the proper care: in any such contingency what does the cattle loan company do? (i) Comment on the quality of cattle paper from the point of view of liquidity, security,

organization of the market for it, etc. (j) What are the common sizes of cattle loans?

272. Loans to Manufacturers of Lumber on Their Straight Notes

Many loans are made direct to the manufacturer upon what we call a straight note, and where a proper checking shows the borrower to possess quick assets sufficient to care for his liabilities in the event of a slump in the market, they are a fairly good investment, but in the lumber business, more than in any other, it is necessary to have the plant and stock well covered by insurance, and the careful banker usually sees that in the event of fire, loss, if any, is made payable to the bank as its interest may appear. Generally, these loans run longer before payment than those made upon assigned invoices, and most bankers find to their sorrow that they have many in the pouch that may be considered permanent investments. Our most successful mill men are careful not to let their paper drop into that category, and they keep their bills payable very active, cleaning up frequently and thereby maintaining a better credit, their reward being a lower rate of interest. They borrow for operating expenses only. Banks do not care to loan their funds for capital and thereby become partners of the borrower upon an interest basis.—[Bulletin of the National Association of Credit Men, October 1917, p. 956, courtesy, Roman Gilder, Editor.]

(a) Distinguish between "loans on assigned invoices" and "loans on straight notes." (b) How does "cleaning up frequently" help maintain a better credit? If the mill borrows at one bank to clean up at another, does this operation improve its credit title? (c) What are the chief items among a mill's quick assets? Is lumber a good quick asset?

273. Measures of Business Efficiency

In determining credit title of applicant borrowers the credit department weighs the apparent efficiency of the applicant by means of rates of turnover, chief of which are: (1) turnover of accounts, (2) turnover of inventories, (3) turnover of plant investment, (4) turnover of all capital.

(a) How is each calculated? (b) Turnover of accounts receivable depends on sales terms, business conditions, and the efficiency of the credit and collection departments: show how. (c) Should the turnover of plant investment be determined in terms physical or in dollar values? If the ratio is declining how may the management build it up? In what industries is this ratio lowest? (d) Does the turnover of total capital measure the efficiency of the financial management? Is it as good measure as the relation of operating profits to sales? or of operating profits to total capital? (e) Should turnover of inventories be calculated on a cost basis or on a sales value basis?

274. The Financial Budget of the Twin City Flour Milling Company

On January 1, 1927, John Smith became part owner and manager of the Twin City Flour Milling Company of Minneapolis. Every operation in this business results either in an expenditure or a receipt of funds, or both. Since he cannot long operate the plant without paying all obligations, it is necessary that his receipts exceed, or equal at least, the disbursements. After carefully examining the physical conditions of the plant, its financial position, and methods of operation, he decided that several changes were necessary. In order to coordinate the various phases of the business more closely and thereby increase the efficiency and profits, he adopted the policy that the following budgets be prepared: (a) sales budget, (b) production budget, and (c) financial budget. The questions refer to the financial budget.

(a) Assume any sized business you wish and prepare a financial program (budget) covering the short term financial requirements of Smith's company for a year. (b) How will such a budget as you have just outlined assist in keeping the disbursements from exceeding receipts? (c) In what way would such a plan enable Smith to borrow his funds more economically? (d) What would be the value of such a budget from the banker's point of view? (e) What are the reasons for the increased use of the financial budget in this country during recent years? [References: McKinsey and Meech, Controlling the Finances of a Business, Ch. 13; McKinsey, Budgetary Control, The Ronald Press Company, New York.]

275. Use of the Commercial Paper Market

In an effort to learn more accurately and completely the attitude of the business executive regarding the use of the commercial paper market as a source of working capital, several large business men were interviewed. Some of these men stated that they used commercial paper on open market borrowing regularly and quite extensively for short-term borrowing, while others stated that they did not use the commercial paper market at all. The following conversation took place with one very large manufacturer:

"Do you use the open or commercial paper market for short-term borrowing?"

"We do not borrow or sell through the commercial paper houses."

"Your firm is a large one. Could you not borrow a part of your funds at a smaller cost in that way?"

"The rate for commercial paper in the open market is often lower than the rate we pay at our banks. In the long run we have always preferred to borrow directly from commercial banks. During the periods of financial depression, there is always difficulty in disposing of the com-

mercial paper and at such times the rates are much higher, and it is not infrequent that borrowers are not able to sell their paper. They are then forced to fall back upon the bank. The banks under such circumstances owe their first allegiance to their regular customers who have been depending upon the bank at all times. At such times borrowers frequently have serious difficulties in obtaining funds at all. The bank under those circumstances will first advance the rate against the late comer, in this case, the late commercial paper borrower. The average rate for funds are thus materially advanced to that type of borrower.

"We have always felt that it is cheaper and better for us to do our financing directly even though we may at times be paying a larger interest rate. In the end the expense is approximately the same. If we do our business with banks when the demand for funds is small in comparison with the supply, the bank is under obligation to provide us funds when we are under a strain."

"Could you not split your borrowings, obtaining some from the open market and the remainder from your banks?"

"That might be feasible for some firms. From our standpoint the trouble of selling, the commission fees, and the danger of being cut off from the supply has lead us to the conclusion that it is more economical for us to borrow from the banks only."

(a) How does the interest rate paid by bank borrowers compare with that paid by the borrowers in open commercial paper market? (b) What is customary rate of commission charged by commercial paper houses for selling commercial paper? To what interest rate per annum is that equivalent? (c) Do you agree with the analysis or reasons for borrowing solely at banks? Why? (d) Since only large borrowers have been using the commercial paper market, would it not be desirable for the commercial paper house to adopt a graduated rate, charging a higher rate as the amount of commercial paper offered becomes smaller? Would not this method open up the commercial paper market to smaller borrowers?

276. The Industrial Equipment Trust Corporation of America—the "Freeman Plan"

It is announced that interests identified with Freeman & Co., car trust bankers, are working in connection with several manufacturing industries on the organization of a new departure in industrial financing. The proposed corporation, which is to be known as the "Industrial Equipment Trust Corporation of America," it is planned, will undertake to apply the principle of equipment trust financing now used in connection with the purchase and sale of railroad rolling stock, to the purchase and sale of standard units of industrial equipment. . . . A plan has been evolved by the bankers and their associates to be known as the "Freeman Plan." It is planned that the "Industrial Equipment Trust Corporation of America" will arrange for the purchase of these units from the better known manufacturing companies, accepting from the purchasing companies a certain percentage in cash and issuing industrial equipment trust notes covering the payment of the balance . . .

During the life of these notes the equipment under the "Freeman Plan" will be leased to the purchaser at rentals sufficient to care for the maturing principal and interest of the outstanding certificates. Provisions have been worked out covering the recovery of pledged equipment in the event of default of any of the purchasing companies and a special form of legal instrument will be devised to permit application of certain necessary restrictions which will be used for the protection of investors purchasing the certificates. Title to the pledged equipment will be vested in a trust company as trustee for the certificate holders and each unit of pledged equipment will bear a metal pledge during the life of the loan giving the name of the trust company as owner and trustee for the benefit of the certificate holders. The management of the new company will be vested in the same hands as that now existing in the National Steel Car Lines Co., a corporation organized by the same interests in 1920, and which has since handled many thousands of dollars of industrial equipment. . . . The national distribution of these certificates will be undertaken by Messrs. Freeman and Co., who expect to head a large syndicate, which will handle the first piece of business to be issued under the new plan. In addition to this syndicate, smaller dealers in practically every State in the Union will be given an opportunity to participate in a distributing group in order that a country wide market may be created for these certificates.—[*Commercial & Financial Chronicle,* October 25, 1925, p. 1906, by permission.]

(a) How does this type of finance differ from that of the finance companies handling automobile installment paper? (b) Are equipment trust certificates regarded as a very safe type of investment? Why? (c) Why did the plan of finance develop first in railway equipment? (d) Why does the distribution plan involve the syndicating of the issues?

277. Standardization of Installment Sales Terms

Resolutions of the National Association of Finance Companies, December 11, 1924, at Chicago organization meeting:

Now, therefore, be it resolved, That, effective on or before Feb. 1, 1925, in the territory east of the Rocky Mountains, and as soon thereafter as may be feasible in the territory west of the Rocky Mountains, all finance companies and bonding companies which guarantee automobile paper be, and they are hereby urged to only purchase, discount, lend upon or guarantee automobile retail paper covering the sale, lease or mortgage upon new or used passenger cars for individual use, as follows:

(a) On monthly installment paper covering new passenger cars, the maximum maturity of such paper shall not exceed 12 months, payable in equal monthly installments.

(b) On monthly installment paper covering new passenger cars, the minimum down payment by purchasers shall not be less than either one-third of the cash or 30% of the time selling price at point of delivery, including accessories and equipment.

(c) On monthly installment paper covering used passenger cars, the minimum down payment by purchasers shall not be less than either 40%

of the cash or 37% of the time selling price at point of delivery, including accessories and equipment, with a maximum maturity of 12 months, payable in equal monthly installments.

And be it further resolved, That all manufacturers and distributors of and dealers in passenger cars be and they are hereby requested to cooperate in a sincere endeavor to confine the sale of new and used passenger cars for individual use within the aforesaid limitations, in order to continue to keep the manufacture, distribution and retail financing of passenger automobiles upon time upon a safe and sound basis.

(a) What was the occasion of the founding of the National Association of Finance Companies? What are its functions? Did the banks or the finance companies start the movement for founding the association? (b) In what ways will the establishment of uniform sales terms promote automobile financing? (c) Why should the period be 12 months or less? the minimum down payment one-third? the minimum down payment on used cars more than on new cars? (d) What success has attended the efforts of the association? Does the movement cover finance companies that handle other than automobile paper?

278. The Allied Rediscount Corporation

Chartered in New York; organized in January 1927. This represents the combined movement by finance companies throughout the country and contemplates inviting other responsible companies to join as fast as memberships are available. The idea of the corporation is strictly cooperative, to be national in scope. The companies instrumental in starting this movement have agreed that membership in the organization shall be subject to the following requirements and restrictions: periodical audits of member companies' books by certified public accountants, limitation of automobile financing to twelve months, 33 1/3% cash payment on the purchase price of new cars, 40% cash payment on used cars, no member company at any time to have outstanding obligations in excess of a ratio of four to one as against capital and surplus, and that only during the heaviest season of borrowing. The Guaranty Trust Co. of N. Y. to act as trustee. The underlying collateral, against which guaranteed notes of the Rediscount Corporation are to be issued, will consist of collateral trust notes of the individual member finance companies, the underlying purchase money obligations being trusteed at their local banks. The Corporation's notes are guaranteed unconditionally by the Metropolitan Casualty Insurance Company of New York.

(a) What effect is it hoped this corporation will have on: (1) the diversity of finance paper, (2) the over-extension of finance paper, (3) the competition of automobile companies in sales terms? (b) Is

the organization of this corporation likely to hasten or delay the state regulation of the finance companies? (c) Is the organization of this corporation a tacit approval of the federal reserve system? (d) Examine the provisions cited for protecting the notes of the corporation and decide whether they are adequate? (e) Who will purchase these notes? Will they constitute a regular part of the discount market?

CHAPTER XI

BANK INVESTMENTS

279. Investment Banking versus Commercial Banking

Professor Willis makes the following comparison between investment banking and commercial banking:

In the case of the commercial bank, we have an institution which tests and analyzes credit, guarantees it, and undertakes to redeem on demand the obligations which it has incurred on behalf of its own customers. The banking function in its commercial aspect is thus essentially a co-operative function. Its service is found in placing units of fluid capital or credit at the disposal of those who want to use them immediately, upon condition that these persons, when they have finished using these funds, promptly return them in order that they may be used by others.

The underlying thought in banking in the commercial sense of the term is thus intimately associated with the idea of short term, or power to liquidate, and is the direct antithesis of investment, or long-term use of funds. Whenever a commercial bank begins to allow its funds to be "tied up," that is to say, closely involved or absorbed in long-term operations, it has started upon the road to disaster. This disaster may not necessarily grow out of a complete lack of resources, but may be merely due to the fact that the bank is unable to liquidate the obligations it has incurred, when they are presented. To keep its funds turning over rapidly and thereby to enable itself to meet the calls of depositors through the use of funds that have been turned in to it by borrowers, is the object of every well-managed commercial bank.

Investment banking, on the other hand, is also a co-operative undertaking but is co-operative in quite a different sense of the term. When an individual places his savings in the savings bank, he does so with the intent on his part not to draw them out immediately. He may wish to draw them out at a later date, but the underlying assumption is that the great body of the savings bank depositors do not wish to do so, but have permanently placed their funds with the bank. They have, in other words, given the bank title to wealth which they have acquired through their labor or otherwise, and the service which they ask of the bank is not the extension of credit, but is the safe-keeping of these funds and the using of them in such a way as to yield a moderate income. The savings bank meets this obligation by putting its deposits into forms which represent capital that has been productively applied, or in other words, "invested."—[Willis, American Banking, rev. ed., pp. 108-9, LaSalle Extension University, Chicago, by permission.]

(a) What is the essential difference between commercial credit and investment credit? (b) Is a commercial bank doing an investment banking business when it buys bonds due in 1950 of some well managed railroad? Why? (c) Summarize Professor Willis' discussion. (d) What do you regard as the primary distinction between commercial and investment banking? Wherein, if at all, does it differ from the view expressed by Willis?

280. Scope and Nature of Bank Investments

It will be found that a bank's investment in stocks and bonds is one of the largest if not the largest items on the bank's statement. While it is large in point of value, however, the securities which the account represents are often small in volume. This permits of easy and complete verification.

The account as carried by different banks varies in name. By some it is called "Stocks and Bonds," by others "Bonds and Securities Owned," "Securities Owned," and so forth. Sometimes all investments of this character will be found in one account, but more often separate accounts are maintained for the following divisions: (1) government bonds, (2) bonds to secure circulation, (3) other securities, (4) stock of the Federal Reserve Bank.

As the methods of verification are similar for all of these, all forms of investment of this kind are discussed under the caption of "Stocks and Bonds." It will be found that the majority of securities owned consist of bonds, although there are a number of banks which invest considerable amounts in stocks. There is no rule against the investment of a bank's funds in stocks. However, bonds are safer and most banks confine themselves to bonds, only carrying such stocks as are received by them through reorganizations, as bonuses and the like.—[Millet, Bank Audits and Examinations, p. 113.]

(a) Why is stock in a federal reserve bank classified as an investment? (b) Do you agree with "bonds are safer and most banks confine themselves to bonds"? Explain. (c) Why are good common and preferred stocks not regarded as a proper investment for commercial banks? (d) What is included in "other securities"? (e) What stocks are national banks compelled to own? permitted to own?

281. Relation of Loans, Discounts and Investments to Capital and Surplus of New York Trust Companies 1890-1925

The table on page 229 shows the total capital, surplus, loans and discounts, investments and the number of trust companies in operation from 1890 to 1925. Study this table carefully.

(a) How does the average size (as measured by capital and surplus) of trust companies in New York in 1890 compare with that in 1925? Explain. (b) Draw a chart showing the loans and discounts, investments, and combined capital and surplus. (c) Discuss the

(000 omitted)

Year	No. in Operation	Capital	Surplus	Loans, Disc. Overdrafts	Investments Bonds and Mtgs.
		$	$	$	$
1890	32	24,787	26,598	191,149	64,318
1895	38	28,800	39,433	171,745	119,125
1900	59	48,050	71,219	359,245	206,339
1905	81	61,850	104,466	753,797	360,213
1910	85	71,400	186,686*	807,166	349,887
1915	82	79,600	176,745*	1,142,694	642,001
1920	100	151,429	219,945*	1,883,484	748,427
1925	110	213,100	288,625*	2,388,608	1,113,074

* Includes surplus and undivided profits.

changes in the ratio between the combined capital and surplus and each of the other two items. (d) Draw another line on your chart showing the loans, discounts and investments combined. (e) How do you account for the large increase in surplus as compared with capital?

282. Losses on Commercial Paper

The National Credit Office, New York City, published the following statement with respect to losses on commercial paper as compared with other investments:

During the four years ending 1925, the average percentage loss assumed by banks on commercial paper was 1/33rd of the average net percentage loss on investments, and 1/29th of the percentage loss on direct loans and discounts. . . .

For the twelve months preceding June 30, 1922, national banks charged off losses on investments in bonds and other securities, less adjustments on recoveries, the net sum of $26,086,000. This amount represented 0.0118 of the investments of national banking institutions, exclusive of their holdings in U. S. Government securities and stocks in Federal reserve banks.

In 1922, the losses on the average outstanding open market paper were the very moderate fraction of 0.00013, or 1/77th of one per cent. That is, net losses on investments were on a ratio basis of ninety-one to one with total losses on commercial paper.

For the year ending June 30, 1923, both dollar and percentage losses on investments were reduced still further. In 1924 they reacted upward and during the following year were again more moderate. Notwithstanding the reduction in 1923, the percentage loss on investments was twenty-seven times as large as on commercial paper.

In 1924 and 1925, the percentage loss of national banks on investments was reduced to about 3/4th of one per cent, while the loss on commercial paper was increased to a maximum of about 1/10th of one per cent for 1924.

A comparison of the minimum percentage loss on investments with the maximum percentage loss on commercial paper is on a ratio basis of about seven to one in favor of commercial paper.

(a) Do the above cited losses vary with the business cycle? Are the changes more marked in case of commercial paper than of bonds? (b) The market rate of interest in recent years has tended downward: similarly, the general commodity price level. These with other factors have caused rising bond prices. Times have been prosperous. Losses from investments in such times should be especially low. Do these factors have the same effect on losses from commercial paper? (c) What is the source of data on losses from commercial paper?

283. Cost of Investing in Commercial Paper and in Bonds

I. The cost of distribution, of selling commercial paper to the representative banks and trust companies of the country, is borne entirely by the commercial and industrial concerns which obtain credit in the open market. This service charge, which usually amounts to only $12.50 for every $5,000 note, is paid directly to the broker by the borrower. A bank buying commercial paper to yield 5% obtains a discount rate of 5% and no less. The return is fixed, definite and assured. And there is no additional cost involved in collecting the principal at maturity.

The cost of distribution, of buying and selling listed bonds, with the exception of new issues, is borne entirely by the investor. A bank investing $5,000 in an issue of industrial bonds which is selling on the New York Stock Exchange to yield 5%, pays the bond broker a fixed charge of $2.00 per $1,000 for executing the order, this charge reducing the net yield to the bank by 1/5th of one per cent if the bonds are held an entire year. Unlike the principal of commercial paper which is available automatically at maturity, another charge is made by the broker for selling service, another fixed charge of $2.00 per $1,000 to dispose of the bonds.

So that the net yield to the bank, provided no drop has occurred in the market price of the issue, is not 5%, as originally seemed the case, but 4 1/5% per annum if the bonds are held six months, and 4 3/5% if they are held an entire year.—[National Credit Office.]

(a) Does the fact that commercial paper has short usance affect the above disparity of costs to the bank? (b) The above calculation ignores the differences in expense of credit investigation of commercial paper names and of bonds, as well as the difference in expense of accounting and holding and collecting at maturity or sale: in favor of which type of investment does this expense item run?

II. The National Credit Office suggests the following advantages to a commercial bank from investing surplus funds, which it may be called upon to lend to depositors at the next peak of their borrowing season, in commercial paper:

1. The return is fixed, definite, and assured.
2. The return is in the form of a discount and not interest.
3. Commercial paper is rediscountable at each of the federal reserve banks.

4. There is no charge for buying or collecting at maturity.
5. The face value of the open market note does not fluctuate.

(a) Explain and criticize each of the alleged advantages. (b) The discount rate for commercial paper ranks next to that for bankers' acceptances with respect to stability from month to month and year to year: what relation does this bear to breadth of market for the two types of paper? How do the two rates compare in size?

284. Domestic Acceptances in England

In England . . . the majority of credit instruments are trade drafts and acceptances. The exception is found in Wales, where it has long been the practice to finance farmers on their note in hand. A certain number of promissory notes are presented through the clearing for collection but they are nearly always the outcome of pure money-lending transactions. Money lenders and firms selling furniture on the hire-purchase system frequently safeguard their interests by taking a series of promissory notes from the debtor at the time he enters into the bargain. . . . The general practice in transactions between trader and trader is for the balance of an account to be settled by the creditor drawing on the debtor. . . . The bulk of small trade acceptances are discounted at branches throughout the country and sent to the Bill Office at Head Office, where they are held in the bank's portfolio and collected at maturity. The general rule is that a creditor send his draft with his invoice showing particulars of what is due to him from the debtor who has received the goods. The debtor accepts the bill, which, except in the overseas trades, is drawn so many days after date. The creditor then goes to the local branch where he keeps his account and asks them to discount the bill. The creditor customer indorses it, and thus the bank has the guarantee of his indorsement.—[Minty, English Banking Methods, p. 312, Isaac Pitman & Sons, 2 W. 45 St., New York City, by permission.]

(a) Contrast this system with the open-account, cash-discount system in the United States. (b) Is there occasion in England for such transaction as loans on the basis of pledge of accounts receivable, or for the sale of accounts receivable? (c) Are the domestic acceptances rediscounted in the London market? (d) "It would very much surprise American bankers to realize how very little credit information is put down on paper in an English bank and yet how few mistakes in judgment are made." Is this difference due to the development of branch banking, or to the historical intimacy of customer and banker? (e) When the branch bank discounts a domestic acceptance, the discount rate, although formerly 1% above the Bank rate, minimum 5%, nowadays varies greatly in individual cases: what has caused this change toward diversification? (f) When bills are discounted by a branch they are usually sent soon to the head office: why? What is the function of the inspection office of the head office? (g) Sometimes customers lodge bills with the branch for collection when due;

these customers' bills for collection are called "short bills": why? What is their course till payment is received?

285. Loans and Investments of National Banks, State Banks and Trust Companies

(000,000 omitted)

	National Banks		State Banks and Trust Companies	
	Loans	Investments	Loans	Investments
	$	$	$	$
1917	8,958	3,013	8,423	2,680
1918	10,136	3,957	9,177	3,374
1919	11,010	5,048	10,794	4,350
1920	13,611	4,186	13,565	4,129
1921	12,005	4,025	13,416	4,381
1922	11,248	4,563	12,340	4,616
1923	11,818	5,070	13,829	5,011
1924	11,979	5,142	14,205	5,467
1925	12,674	5,730	15,445	5,854
1926	13,418	5,842	16,496	6,027

[Report of the Comptroller of the Currency, 1921, p. 760; 1926, pp. 405, 406, 602.]

(a) Chart the data included in this table, showing: (1) loans for national banks, (2) loans for state banks and trust companies, (3) investments for national banks, (4) investments for state banks and trust companies, (5) total loans for all banks, (6) total investments for all banks.

(b) Make an analysis of the data and your chart and show the relative growth of each item. Have the results been the same in state banks and trust companies as in the case of national banks? (c) By reference to the Annual Reports of the Comptroller of the Currency, determine the relative changes by state commercial banks as compared with trust companies. (d) What conclusions, if any, can you draw regarding the changes in bank investments by commercial banks?

286. Investments According to Class of Bank

The following table shows the investment position of all commercial banks and stock savings banks as of June 30, 1926.

(a) The student should determine and fill in the various percentages indicated in the table. (b) Make a comparison of the different types of banking institutions as regards the relative volume of investments held. (c) How do you account for the large volume of loans outstanding by the stock savings banks? (d) Which class does the largest volume of real estate lending in proportion to size?

LOANS AND DISCOUNTS OF COMMERCIAL BANKS, INCLUDING STOCK SAVINGS BANKS, IN THE UNITED STATES, JUNE 30, 1926

(000,000 omitted)

	National Banks (7,978)	State Com'l Banks (16,493)	Loan and Trust Companies (1,656)	Private Banks (495)	Stock Savings Banks (904)	Total (27,526)
	$	$	$	$	$	$
Stock and bonds owned	5,842	3,220	2,807	36	504	12,409
Real estate	749	607	313	13	77	1,759
Loans secured by real estate	725	624	671	6	25	2,051
Loans secured by collateral (other than real estate)	5,495	845	1,174	9	12	7,535
All other loans and discounts	7,430	8,234	4,909	77	1,372	22,022
Total resources	25,316	16,580	12,205	174	2,196	56,471
Percentage of investments to total resources	.....	.....	.....	.....	.....	.....
Percentage of total loans and discounts to total resources	.....	.....	.....	.....	.....	.....

[Report of Comptroller of the Currency, 1926, pp. 558–601.]

287. Losses on Investments and Other Assets

The following table shows "losses charged off" for national banks:

(000 omitted)

	June 30, 1925 (8,070 banks)	June 30, 1926 (7,978 banks)
On loans and discounts	$ 95,552	$ 93,605
On bonds, securities, etc	25,301	23,783
On trust department operations	622	393
Other losses	17,876	20,741
On foreign exchange	1,783	6,868
Total	$141,134	$145,390

[Report Comptroller of the Currency, 1926, p. 43.]

(a) What per cent of loss did national banks sustain during 1926 on their total investments? (For total investments see Problem 288.) (b) Were the losses greater proportionately on investments or on total loans and discounts? Explain. (c) Make a comparison of the losses on investments for the years 1918, 1921 and 1924. In what year was the loss heaviest? Do the figures show any trend? Explain. (d) What form or forms do these losses on investments take? Show, if possible, how banks could reduce such losses.

288. National Bank Investments as of June 30, 1914-1926

The following table shows the classification of bank investments, total loans and total deposits as of June 30, 1914 to 1926:

(000,000 omitted)

		INVESTMENTS										
	Number Banks	United States Government Securities	State, County, and Other Municipal Bonds	Railroad Bonds	Other Public-service Corporation Bonds	All Other Bonds	Claims, Warrants, Judgments, etc.	Foreign Government Bonds	Other Foreign Bonds, Securities	Total Investments	Total Loans	Total Deposits
		$	$	$	$	$	$	$	$	$	$	$
1914.....	7,525	799	176	342	218	328	36	10	6	1,915	6,430	8,564
1915.....	7,605	783	244	379	220	340	53	34	13	2,068	6,660	8,821
1916.....	7,579	731	278	468	275	302	141	117	40	2,352	7,679	10,877
1917.....	7,604	1,076	316	467	296	362	144	284	68	3,013	8,958	12,772
1918.....	7,705	2,117	320	406	267	272	291	228	56	3,957	10,136	14,022
1919.....	7,785	3,172	323	412	276	307	309	194	54	5,048	11,010	15,925
1920.....	8,030	2,270	338	416	283	310	328	180	61	4,186	13,611	17,155
1921.....	8,154	2,019	394	405	277	352	374	140	64	4,025	12,005	15,142
1922.....	8,249	2,285	414	486	318	423	386	162	88	4,563	11,248	16,321
1923.....	8,241	2,694	402	503	337	521	367	154	91	5,070	11,818	16,898
1924.....	8,085	2,482	506	574	398	576	344	179	85	5,142	11,979	18,348
1925.....	8,072	2,537	595	674	495	698	369	241	122	5,730	12,674	19,910
1926.....	7,978	2,469	648	631	545	773	404	226	147	5,842	13,418	20,642

[Report of the Comptroller of the Currency, 1926, pp. 405, 406, 407.]

(a) Prepare a chart showing the movement of total deposits, total loans and total investments for the period 1914–26. (b) Make an analysis of the investments of different classes—showing the largest group, the group increasing fastest, the group likely to give largest yield, etc. Make your analysis full and complete. (c) From the *Commercial and Financial Chronicle* take annual data on new bond issues and determine whether the banks have bought their proportionate share of each type of security issued.

289. Investments of Mutual Savings Banks in New York

The following table gives the assets of the mutual savings banks of New York State as of the close of business December 31, 1924 and December 31, 1925:

	December 31, 1924		December 31, 1925	
	Amount (000)	Percentage of Resources	Percentage of Resources	Amount (000)
	$	%	%	$
Bonds and mortgages	2,099,222	55.286+	57.856+	2,339,472
Bond investments:				
United States	554,880	14.613+	12.631+	510,768
New York State	16,606	0.437+	0.385+	15,583
Other states	113,143	2.979+	2.968+	120,032
Municipal	343,930	9.057+	9.853+	362,059
Railroad	422,955	11.138+	11.020+	445,634
Land Bank of the State of New York	714	0.018+	0.030+	1,238
Federal farm loan bonds (first land bank district)	427	0.011+	0.012+	485
Promissory notes collateraled by securities legal for savings bank investments and savings banks books	8,842	0.232+	0.423+	17,130
Cash and bankers' acceptances	150,368	3.960+	3.431+	138,771
Banking houses and lots	39,199	1.032+	1.030+	41,655
Other real estate	2,588	0.068+	0.068+	2,776
Interest (accrued)	42,846	1.128+	1.139+	46,059
Other assets	1,361	0.035+	0.047+	1,938
Total	3,797,081			4,043,600

[Report on Savings Banks, Trust Companies, etc., New York, 1925, p. 9.]

(a) Prepare a table showing similar figures for 1915 and 1920. (b) What per cent of the total assets has been placed in long-term securities (investments)? (c) Why are such large amounts placed in United States securities? Do they yield a larger return? (d) In general what are the limitations placed upon mutual savings banks by the New York State Banking Law? (e) How does the item "Banking house and lots" compare with a similar item for New York trust companies? New York state banks?

290. Buying and Selling Stocks and Bonds

(a) The power of national banks to deal in stocks in general: (1) What was the decision of the court in the following cases: First National Bank of Charlotte *v.* National Exchange Bank of Baltimore, 92 U. S. 122; California National Bank *v.* Kennedy, 167 U. S. 362; Chemical National Bank of New York *v.* Havermale, 52 Pac. Rep. 1071; 120 Cal. 601; Smith *v.* Philadelphia National Bank, 1 Walk. (Pa.) 318; Searle *v.* First National Bank, 2 Walk. (Pa.) 395; Pepperday *v.* Citizens' National Bank of Latrobe, 183 Pa. St. 519? (2) Have these and other decisions and rulings injured national banks in

the investment of their funds in desirable enterprises? Is the right to deal in stocks equivalent to the right to purchase stocks? What is the objection to letting a national bank buy stocks?

(b) The power of national banks to own stock of other banks: (1) What was the decision of the court in the following cases: First National Bank of Concord *v.* Hawkins, 174 U. S. 364; Shaw *v.* National German American Bank of St. Paul, 199 U. S. R. 603; Tillinghast *v.* Carr, 82 Fed. Rep. 298; Metropolitan Trust Co. of New York *v.* McKinnon, 172 Fed. Rep. 846? (2) Under what conditions may a national bank own stocks of another bank? What types of bank stock may a national bank own? Why should banks not be permitted to own stock in other banks? In "chain banking" does the parent bank own stocks of its subsidiaries?

(c) Amendment of National Bank Act relative to buying and selling stocks and bonds: Examine secton 5136 of the Revised Statutes of the United States before and after the passage of the Pepper-McFadden Act of 1927. What additional powers were given the national banks?

291. Investment Character of English Joint Bank Stocks

I. The reason why bank shares have become so popular an investment in recent years is explained by the lowering that has been made in the nominal value of bank shares, and the reduction in the liability for unpaid calls upon them. As part of their policy of amalgamation the management of the English banks aimed at reducing the nominal value of the shares of the combined institutions, and at the same time, in the exchanges of the shares of the joint concerns for the shares of the absorbed institutions, to reduce their unpaid capital. The shareholders in the joint stock bank received a considerable benefit in the reduction on the uncalled liability on the shares of the Joint Stock Bank which they exchanged for shares in the Midland. Thus it has come about that several of the banks have shares as low as £1 and others several classes of fully paid shares. Although in their present sound condition banks are not likely to make calls of unpaid capital, the fact that many of them are fully paid, of small denomination, and promise a large and continued dividend, makes bank shares an ideal investment for the small conservative private investor.—[Minty, English Banking Methods, p. 90, Isaac Pitman & Sons, 2 W. 45 St., New York City, by permission.]

(a) Why were the stocks of English joint stock banks usually not fully paid? (b) If a share of stock is only half paid, and stays so for years on the market, is the liability for assessment of the remaining 50% equivalent to the double liability provisions of the American national banks? (c) Why in bank amalgamations, and how, were the bank shares made fully paid? (d) Why in bank amalgamations, and how, was the par value of the respective shares reduced? (e) Are

the shares of the English banks widely held or is there a high concentration in certain geographical sections and financial groups?

II. Investments of English joint stock banks: The largest proportion of a bank's assets is nowadays held in war loan and gilt-edged securities. The following reasons are suggested for this choice of assets: (1) stabilization of dividend rates; (2) provision against certain contingent liabilities, for example, insurance of employees against infidelity, ill health, widows' and orphans' fund, etc.; (3) substitution of government funded debt for the floating debt of the war period; (4) use as secondary reserve.

(a) Do these reasons explain the absolute increases of security holdings by the banks? the relative increase in the proportion securities bear to total assets? (b) Is each of these factors applicable, with equal force possibly, to American banks?

292. Purchase and Sale of Securities for Customers of English Banks

The principal work of the Stock Office consists in acting as an agent for customers of branches in the sale and purchase of stocks and shares through stockbrokers for their account. There is one peculiarity in the way such business is handled by an English bank, namely, that in every case a stockbroker is employed who again gets his price from a jobber on the stock exchange. There is no "over the counter" business such as is carried out in the bond trading department of an American bank, and in no case is a bank interested in the price at which the stockbroker effects the sale or purchase for the customer. In America many banks may be the recognized shop for a certain stock of which they have taken up portions as members of the syndicate formed to make the issue. Again, an American bank is constantly making purchases of stock of various kinds in which it invests funds on behalf of its personal trust department. It frequently pairs off transactions one against another, and the transactions may never be put through a stockbroker at all. In contrast to this an English bank passes every transaction through the hands of a broker, and bank and broker share between them the 1/8th per cent or whatever commission is charged.—[Minty, English Banking Methods, p. 242*ff*, Isaac Pitman & Sons, 2 W. 45 St., New York City, by permission.]

(a) What are the purposes of pairing off transactions? Is the customer selling the security likely to get as good price for his security as if it were sold through a stockbroker? Is the English or the American system likely to satisfy the customers better? (b) Do English banks participate in security syndicate operations?

(c) "When a customer wishes to buy or sell stocks or shares he usually first approaches the manager of the branch where he keeps his account. If he is not well acquainted with the stock market, he may ask the manager to write to the Stock Office in London to get a

broker's opinion upon what shares are suitable for investment purposes. The bank is careful never to advise the customer itself and takes no responsibility for the broker's opinion which it passes on to him." Contrast this practice with the American, and comment on the merits of the two systems.

(d) "Formerly a large bank did not employ regularly more than thirty or forty brokers, but since the agitation in the Stock Exchange against the payment of half commission to banks, the number is tending to increase, and it is now usual to find that a big bank employs a hundred or more London brokers and twenty or thirty more country brokers." Do American stock brokers depend upon banks for so much of their business? Inquire of a large Wall Street bank as to the usual number of brokers through whom it places its orders.

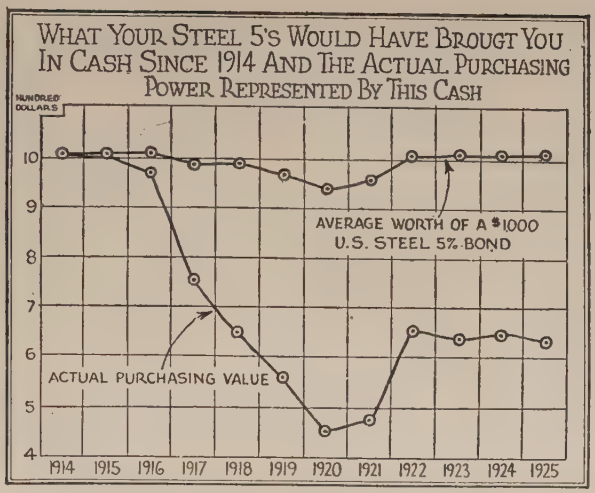
(e) "Bargains may be for cash or for settlement. If they are for settlement, the bargain remains undisturbed in the books of the broker and jobber until the next settlement falls due. Ordinarily settlement days fall due about once a fortnight and are previously fixed by the Committee for General Purposes. The majority of customers who buy and sell stocks through a bank are genuine investors, and when the settlement day comes round they are ready to pay for the stock they have bought or make delivery of the stock they have sold." Banks will not handle transactions known to be purely speculative operations: why? Speculators would not ordinarily operate through a bank anyway: why? Does the New York Stock Exchange have a fortnightly settlement?

293. Effect of Changing Price Level on Value of Securities

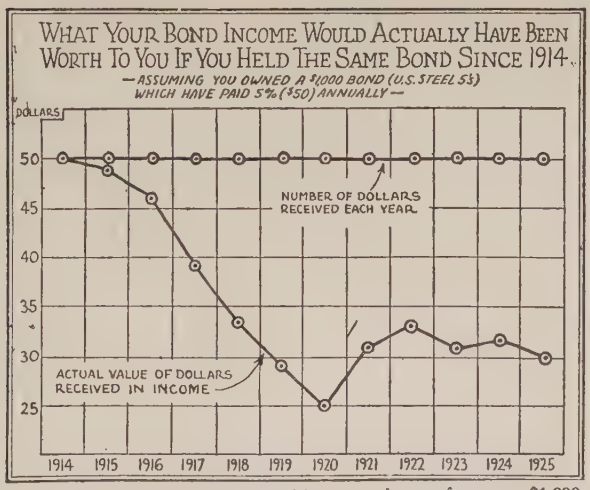
(a) Explain the charts on page 239 showing the effect of changes in the general price level on the value of securities.

294. Amortization of Bond Discount and Bond Premiums

Very few bonds purchased by a bank for permanent investment are bought at par; usually there is a discount or premium of a number of points. The majority of banks do not make any attempt to write off the premium or amortize the discount, and as the lots of each kind of bonds are not very large it does not make much difference. Of course, the true earnings for each year the bonds are held is not being shown, and when the bond matures there will be a loss or a profit to be taken which really belongs to prior years. Where bonds are bought in small lots there are a number of these transactions each year so that the effect as a whole is not very much out of line. In the larger banks or where bonds are bought in large blocks, it is necessary that the premium be written down and the discount amortized, to prevent the taking of a large loss or profit when the


WHAT YOUR STEEL 5'S WOULD HAVE BROUGT YOU IN CASH SINCE 1914 AND THE ACTUAL PURCHASING POWER REPRESENTED BY THIS CASH
HUNDREDS DOLLARS
10
9
8
7
6
5
4
AVERAGE WORTH OF A $1000 U.S. STEEL 5% BOND
ACTUAL PURCHASING VALUE
1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925

This graph shows that while, as gauged by the market price, U. S. Steel 5s, or any other good bond, would have sold at an almost constant number of dollars, owing to the depreciated value of the dollar, however, the actual purchasing value of the bond, if sold, would have been for less.


WHAT YOUR BOND INCOME WOULD ACTUALLY HAVE BEEN WORTH TO YOU IF YOU HELD THE SAME BOND SINCE 1914
—ASSUMING YOU OWNED A $1000 BOND (U.S. STEEL 5's) WHICH HAVE PAID 5% ($50) ANNUALLY—
DOLLARS
50
45
40
35
30
25
NUMBER OF DOLLARS RECEIVED EACH YEAR
ACTUAL VALUE OF DOLLARS RECEIVED IN INCOME
1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925

While you would have received $50 a year income from your $1,000 bond, the value of this income would have fluctuated sharply from year to year since 1914. This is because of the lower value of the dollar. Today the dollar is worth only about 60 cents, as compared with a full dollar in 1914.

[*Magazine of Wall Street*, July 31, 1926, reproduced by permission.]

bonds mature. In exceptional cases it may be necessary for the examiner to take care of this feature of the work, but usually the large banks attend to the matter themselves.—[Millet, Bank Audits and Examinations, pp. 153-4.]

(a) Illustrate how the bond discount and bond premium should be actually and actuarially handled by a bank. Be specific. (b) How will each influence the yield? (c) Commercial banks are warranted, at least to a degree, in marking up or down the book values of their bonds owned, according to changes in market values; but savings banks have less warrant: why?

295. Valuation of Bank Investments in Emergency Periods

Circular from Comptroller of the Currency, October 13, 1917:

After the outbreak of the European War in 1914, the Comptroller of the Currency instructed national bank examiners that national banks need not be required to charge down the values of their high-grade bonds to meet the abnormal and sacrifice quotations which for a while were being made on the outside markets (the stock exchange being closed) on securities which at that time were being thrown overboard regardless of real worth.

This office also earnestly endeavored to prevent the sacrifice by national banks, while the exchanges were closed and there was no general market for securities, of bonds and shares held as collateral for customers' loans.

The policy pursued proved fortunate at that time. After the first pressure was over and money conditions relaxed, the security market was re-established, the grave losses which were threatened by the temporary shrinkage in values were averted, and borrowers from banks were enabled to meet their obligations without the sacrifice of their collateral.

Since the commencement of the war between this country and Germany there has been a heavy depreciation in the quoted values of securities generally, including those of the very highest grade, which have hitherto found ready market in competition with Government issues, and in many cases prices have shrunk to figures which are manifestly far below the prices which would prevail under any normal conditions. This shrinkage or marking down of values is partly due to the efforts of investors to sell other high-class securities for reinvestment in Government bonds.

In view of all conditions the Comptroller of the Currency has instructed national bank examiners that they need not at this time require national banks holding high grade bonds of unquestioned intrinsic value and merit to charge such investments down to present abnormal figures; but an intelligent and conservative discretion will be exercised as to the prices at which national banks can safely and reasonably be permitted to carry such high-class securities, and as to what proportion of the depreciation should be charged off in any six months period.—[Report of the Comptroller of the Currency, 1917, Vol. I, p. 7.]

(a) At what value do and should national banks carry their securities? Should they be changed daily with the changes in the market values? (b) Was the action of the Comptroller in refraining

from marking down security values of national bank holdings a justifiable act in 1914 and 1917? (c) Wherein is the danger of such an action? How did it work out in 1914 and 1917? Did it help to cause the bank failures of 1921-5? (d) What power does the national bank examiner have to compel national banks to change the values at which their securities are carried?

296. Bank Dealings in Investment Securities

The Office of the Comptroller of the Currency is giving much thought to regulations to be issued under the new McFadden act, particularly the provision allowing national banks to deal in investment securities. It may be stated that no general list of securities eligible for dealing will be issued; only general principles will be laid down to define "marketability," and examiners will be expected to use discretion in applying these.

Following is a summary of points on which advice is now being solicited: (1) What *evidences of marketability* shall the Comptroller require for investment securities? (No burden of investigation is to be assumed by the Comptroller; evidence of marketability should be practically self-evident. This brings up the question of quotations on exchanges, number of sales in a given period, extent of the distribution, nature of the trustees, etc.) (2) What are the elements necessary to make a *note* an investment security? (3) Can a definition be made which will include classes of *real estate bonds* and exclude others? (4) Should bonds issued for the purpose of financing the *Construction of apartment houses,* hotels, office buildings, etc., before such construction has begun or is completed, be defined investment securities under the McFadden act?

(5) To what standard of marketability should real estate bonds be required to conform? (6) What evidence should be required that the appraisal of the real estate offered as security for real estate bonds was properly made (Comptroller probably will not investigate specific appraisals; burden of proof will be on others.) (7) Should appraisals be certified by the official appraiser of the local real estate board? (8) Should it be required that the trustee of an issue of real estate bonds be a bank or trust company? (9) What evidences, if any, should be submitted as to earning power as a basis for marketability?—[Kiplinger Washington Letter, March 28, 1927.]

(a) Suggest answers to the points raised.

CHAPTER XII

BANK EARNINGS AND DIVIDENDS

297. Downward Trend of Banking Profits

During recent years much attention has been given to the subject of banking profits. Many people believe that the banking business is an exceedingly profitable one. One writer states that banking profits are on the downward trend. He comments as follows:

The rate at which profits are being earned by banks is diminishing primarily because: (a) The ratio of Interest Paid to Gross Income is increasing; and (b) The ratio of Net Losses to Gross Income is getting larger.

The following figures for the Federal Reserve System indicate this clearly:

In 1923, the combined Member Banks disbursed 31.9 per cent of their Gross Income as Interest Paid, and in 1924, this increased to 33.2 per cent. In one district, this item was 39.5 per cent in 1924. In a typical large bank, which we have personally studied, the percentage increased from 25.5 in 1921, to 30 in 1922, to 31 in 1923, to 32 in 1924 and to 34 in 1925.

Because of keen competition, the Interest Paid Rate is largely beyond the control of an individual bank, but losses and other major groups of expenses are within its control. The ratios of salaries and operating expenses to gross income are not diminishing; in fact, in many instances, they also are increasing. Many banks, therefore, find that they are failing either to earn their dividends or to gain a satisfactory income on their own funds.

Knowing that certain partially controllable expense ratios are increasing, bankers must apply intensive methods of management to their own business and bring controllable expenses under control.

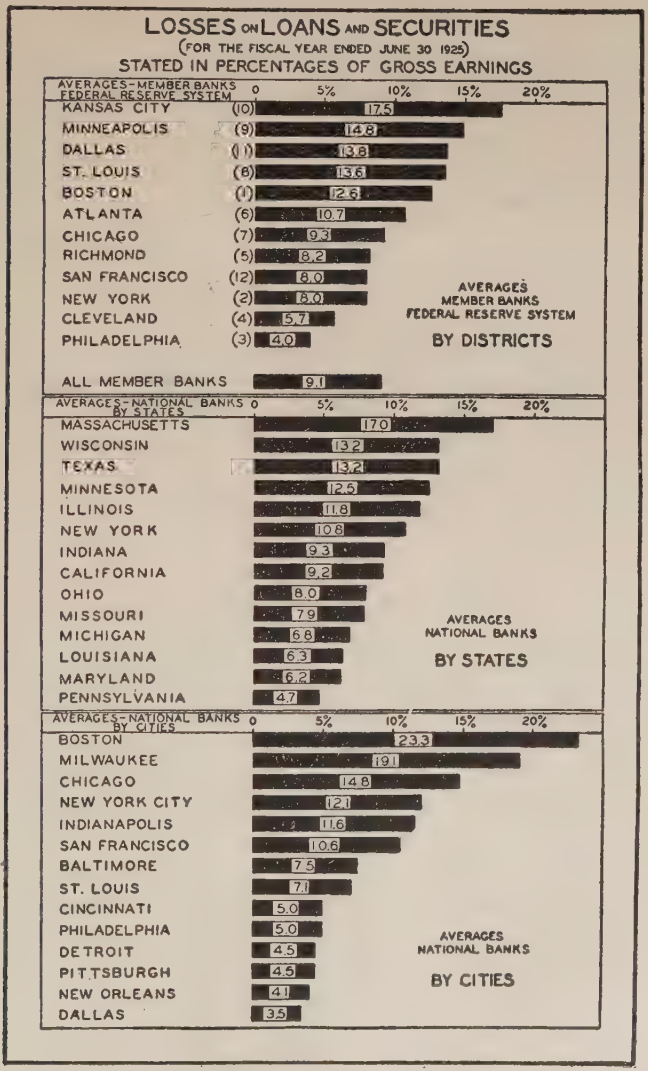
In another paragraph he gives in broad outlines his solution as follows:

A solution to the problem is to develop an effective organization; to analyze costs and reduce them to a standard basis; to control expenses by means of a carefully prepared budget; and to develop and apply proper credit and administrative policies; in short, to place banking operations and practices on a sound business basis.—[*Bank Administration*, Chicago, 1925, pp. 3-5, H. N. Stronck & Co., by permission.]

(a) How do you account for the widespread belief that the banking

business is an unusually profitable one? (b) From your study do you feel that banking profits in general are on the decline? Why? (c) Analyze and criticize the solution offered for this problem.

298. Distribution of Losses by Banks on Their Loans and Investments



[Courtesy of H. N. Stronck & Company, Chicago.]

(a) Account for the high losses in the Federal Reserve District of Kansas City, in the state of Massachusetts, and in the city of Boston.

299. The Service Charge

Banks in some of the larger cities have been for a number of years accustomed to require their depositors carrying checking accounts to maintain a certain average daily balance. The amount fixed varies from $50 or less to several thousand dollars, depending upon the location of the bank, the size of the bank and its general class of customers. Many banks after determining what the minimum average daily balance should be, fix a service charge for those depositors who do not maintain the proper daily average. This charge is generally added to the depositor's account at the end of the month. The charge is made on the theory that the depositor should pay the bank's expense in carrying the account.

Banks located in many smaller cities and country districts have not found it advisable to request fixed balance requirements. They have preferred to carry the account, though they knew it was small and unprofitable, rather than face the opposition which would arise by reason of this new charge. The feeling of bank directors and officials is changing somewhat in this regard during recent years as banking competition becomes keener and keener.

The following quotation shows the efforts being put forth by the Nebraska Bankers Association in this regard:

SERVICE CHARGES IN NEBRASKA

The Nebraska Bankers Association is carrying on a vigorous campaign for the institution of a service charge on small and unprofitable accounts. One of the difficulties it has found is that "in many places the banks talk very favorably, and all seem to want to start on the plan, but cannot seem to get started." Most of the bankers are afraid to start unless all the other banks in their town or county will start at the same time. However, in spite of this, a number of banks throughout the state started to impose a service charge on January 1, and the association reports that the list is growing very satisfactorily.—[*Bankers Magazine,* January 1926, p. 193.]

(a) Are banks justified in requiring the maintenance of fixed average balances? Why? (b) Are they justified in making a service charge when the balance falls below the fixed requirements? (c) Bank "A" requires an average balance of $200. When the average falls below this amount, a service charge of $2 per month is made. Do you regard the service charge in this case excessive? Explain your position fully.

300. Earnings of National Banks, 1869-79

Period of Six Months Ending	Ratio of: Dividends to Capital	Ratio of: Dividends to Capital and Surplus	Ratio of: Earnings to Capital and Surplus
	%	%	%
Sept. 1, 1869	5.42	4.50	6.04
Sept. 1, 1870	4.96	4.08	5.19
Sept. 1, 1871	4.96	4.07	5.02
Sept. 1, 1872	5.12	4.17	5.36
Sept. 1, 1873	5.09	4.09	5.46
Sept. 1, 1874	5.09	4.03	4.86
Sept. 1, 1875	4.88	3.85	4.56
Sept. 1, 1876	4.50	3.57	3.25
Sept. 1, 1877	4.54	3.62	2.50
Sept. 1, 1878	3.81	3.04	2.31
Sept. 1, 1879	3.82	3.05	2.96

(a) Plot the curves for these three series. Do they vary together? (b) Which is the better measure of the condition of the banking world? (c) What was the general trend of bank earnings during this period? Had the drift of the general price level anything to do with the trend of earnings? Were there similar trends after 1919? (d) Which of these ratios is the more stable? why? (e) The ratio of "earnings to capital and surplus" declined further than the ratio of "dividends to capital and surplus." What does this mean as to the source of the dividends?

301. Earnings of the Federal Land Banks

District	Capital Authorized	Capital Called	Debentures Outstanding	Net Earnings	Paid U. S. Treasurer. under sec. 206 ¶B
	$	$	$	$	$
Springfield	5,000,000	1,000,000	1,750,000	15,358.42	7,679.21
Baltimore	5,000,000	1,000,000	4,000,000	24,321.69	12,160.85
Columbia	5,000,000	2,000,000	3,000,000	42,325.27	21,162.64
Louisville	5,000,000	2,000,000	1,750,000	27,184.05	13,592.03
New Orleans	5,000,000	2,000,000	3,000,000	30,642.64	15,321.32
St. Louis	5,000,000	1,000,000	1,750,000	15,958.49	7,979.24
St. Paul	5,000,000	2,000,000	2,000,000	21,214.31	10,607.16
Omaha	5,000,000	1,000,000	2,250,000	16,591.28	8,295.64
Wichita	5,000,000	2,000,000	3,000,000	34,824.97	17,412.48
Houston	5,000,000	2,000,000	3,000,000	27,454.89	13,727.44
Berkeley	5,000,000	2,000,000	3,000,000	32,277.16	16,138.58
Spokane	5,000,000	2,000,000	2,000,000	16,389.23	8,194.61
Total	60,000,000	20,000,000	30,500,000	304,542.40	152,271.20

[Annual Report of Federal Farm Loan Board, 1923, p. 21, Appendix No. 9.]

(a) What is the distinction between the two items, "capital authorized" and "capital called"? (b) Who are the stockholders of these banks? What changes in this respect have occurred since the founding of the system? (c) What are the net earnings on the capital of these banks as a whole? Which bank has yielded the largest returns on the capital invested? (d) Explain paragraph B, section 206 referred to in the last column.

302. Campaigns for New Savings Accounts

The First Wisconsin National Bank conducted a three months' campaign for new savings accounts, and set 5,000 accounts as the goal. The accounts obtained numbered 5,408, and the money represented amounted to $527,000. The 400 employees were divided into 18 teams and supplied with printed matter, including introduction cards, identification cards, and receipt books for initial deposits. There were cash prizes and special prizes, team prizes and cash bonuses. The scoring was by points. The amount distributed in prizes and bonuses was $4,040, and the total cost of the campaign was $4,365. As a result of the activities during the contest new business continues to come to the bank, not only in savings deposits, but also along other lines.—[First Wisconsin National Bank, Milwaukee, article by Herman Eskuche, in *The Bankers' Monthly.*]

(a) Lay out plans for a campaign for new accounts for the savings bank of your town. (b) If some special campaign has been operated recently in your town for savings accounts, write it up. (c) Suggest rules to guide solicitors in such a campaign lest the ill will of the other banks be roused.

303. Determining the Profitableness of Savings Accounts

Given the following data:

Average total deposits		$6,000,000
Average number of accounts		25,000
Total ledger entries per year		150,000
Annual costs:		
Interest paid		$150,000
Overhead	$15,000	
Advertising	10,000	
Rent	5,000	30,000
Clerical hire	11,000	
Stationery	2,500	13,500
Rate of interest earned on loanable funds after taking account of reserve requirements		5.25%

(a) Are rent, advertising, and overhead fairly charged against the volume of deposits? Calculate this cost per dollar of deposits. (b) Are clerical hire and stationery fairly charged according to number of transactions? Calculate this cost per transaction. (c) Calculate the average number of transactions per account. (d) Calculate the average

rate of interest paid on deposits. (e) Calculate the net profit on an account having an average balance of $300 for one year with ten ledger entries. (f) Calculate the net profit on an account whose balance averaged $24 for the year and which occasioned six ledger entries. (g) Suggest a method of determining the minimum balance that is still profitable.

304. Cost of Operating Savings Bank Accounts

Investigation by Savings Bank Association of the State of New York. Based on replies to questionnaire from 118 banks in the state of New York:

Group	No. of Reporting Banks	No. of Depositors	No. of Withdrawals	Total Transactions	Operating Expenses	Average Cost per Transaction
					$	$
I	19	1,016,234	462,242	1,478,476	929,607.43	0.62
II	13	467,364	223,380	690,744	454,396.02	0.65
III	26	627,325	259,298	886,623	656,131.98	0.74
IV	38	4,038,986	1,856,470	5,895,456	4,831,275.43	0.81
V	32	2,315,199	971,467	3,286,666	2,577,288.79	0.78
	118	8,465,108	3,772,857	12,237,965	9,448,699.65	0.77

A similar study of 196 savings banks in Massachusetts showed an average cost per transaction of 88 cents, in 1920.

The average number of transactions per account in New York during the year was about 3.5.

Ratio of operating expense to total resources in New York was 0.0025 and in Massachusetts 0.0035; of this clerical salaries, etc., in New York took 0.0020 and in Massachusetts 0.0021.—[From *The Banker and Financier,* courtesy Financier Publishing Co., New York.]

(a) If a New York bank had the average number of transactions per year (i.e., 3.5) and the average cost per transaction (i.e., 77 cents) and was paying 4% interest on deposits, draw some conclusions as to the profitable size of accounts, provided the bank was able to realize net 6% on its investments. (b) Suggest reasons why the operating cost of savings banks is higher in Massachusetts than in New York. (c) How should the average cost per transaction vary with the business cycle? (d) In calculating the cost of an account what allowance should be made for the reserve required?

305. Earnings and Expenses of Member Banks

The costs and earnings for banks in different parts of the country vary very considerably. The earnings and costs for the country as a whole can be best shown by the statistics of members banks of the

federal reserve system. The following table gives the figures comparatively for the years 1924 and 1925.

ANALYSIS OF MEMBER BANK COSTS AND EARNINGS, 1925 AND 1924

	Amount (000 omitted)		Amount per $100 of earning assets	
	1925	1924	1925	1924
Total loans and investments[1]	$29,916,525	$27,661,791	.....	.....
Interest received	1,615,595	1,514,500	$5.40	$5.48
Other income	302,499	271,971	1.01	.98
Gross earnings (total)	1,918,094	1,786,471	6.41	6.46
Salaries and wages	372,741	355,018	1.25	1.28
Interest on borrowed money	25,954	24,746	.09	.09
Interest on deposits	643,158	594,432	2.15	2.15
Taxes	102,411	97,341	.34	.35
Other expenses	223,053	208,987	.74	.76
Total expenses	1,367,317	1,280,524	4.57	4.63
Net earnings	550,777	505,947	1.84	1.83
Losses on loans	128,774	133,079	[2].61	[2].68
Losses on securities	35,127	33,196	[3].39	[3].41
Other losses	29,198	31,068	.....	.....
Total losses	193,099	197,343	.65	.71
Net losses [4]	131,293	144,604	.44	.52
Net addition to profits	419,484	361,343	1.40	1.31
Dividends declared	272,686	258,044	.....	.....

[1] Average of amounts from reports of condition during the year.
[2] Amount per $100 of loans.
[3] Amount per $100 of security holdings.
[4] Total losses charged off less recoveries on assets previously charged off.

Gross earnings per $100 of earning assets were slightly smaller in 1925 than in 1924, the decline in interest received per $100 of earning assets having been only partially offset by increases in other forms of earnings including commissions and appreciation in security values. Total expenses per $100 of earning assets declined somewhat, however, and the average rate of net earnings was approximately the same for the two years. Losses charged off on loans were 61 cents per $100 of loans and losses on securities were 39 cents per $100 of securities. The net amount of losses charged off * was somewhat smaller in 1925 than the year before, so that the margin of net profits, which this year was $1.40 per $100

* Total losses charged off less recoveries on assets previously charged off.

of earning assets, was somewhat larger than last year when the margin was $1.31.

During the year the volume of the banks' loans and investments, at $29,916,525,000,* was about $2,250,000,000 larger than for the year before; invested capital, as measured by capital, surplus, and undivided profits, amounted to $4,699,751,000, and showed a relatively small increase for the year, so that there was, on the average, $637 of member-bank credit in use per $100 of invested capital in 1925 as against $616 in 1924. As a consequence of the larger volume of earning assets relative to invested capital and the higher margin of profit per $100 of earning assets, the rate of return on invested capital increased from 8.04 per cent for 1924 to 8.93% for 1925. In the following table are shown, for both years, the volume of earning assets and of invested capital, together with the rates of profit per unit of earning assets and per unit of invested capital:

PROFITS OF MEMBER BANKS IN RELATION TO EARNING ASSETS AND INVESTED CAPITAL, 1925 AND 1924

	1925	1924
Capital, surplus, and undivided profits [1] (000 omitted)	$ 4,699,751	$ 4,491,663
Loans [1] (000 omitted)	21,022,170	19,498,525
Investments [1] (000 omitted)	8,894,355	8,163,266
Earning assets [1] (000 omitted)	29,916,525	27,661,791
Earning assets per $1 of capital, surplus, and undivided profits	6.37	6.16
Profit per $100 of earning assets [2]	1.40	1.31
Profit per $100 of capital, surplus, and undivided profits [3]	8.93	8.04

[1] Averages of amounts from reports of condition during the year.
[2] Identical with amount shown under similar caption in preceding table.
[3] Obtained by division of amount of profit by amount of invested capital; equivalent to the product of the two preceding ratios.

[The Federal Reserve Bulletin, June, 1926, p. 410.]

(a) How do you account for the fact that member banks enjoyed larger earnings in 1925 than in 1924? (b) How do you account for the lower loan losses in 1925 than 1924? Was better bank management responsible for this change? (c) Which is the better basis for judging the strength and importance of a bank, total assets, or capital and surplus? Explain.

* Average of amounts given in reports of condition for five call dates during the year.

306. Banking Ratios As Criteria of Condition of National Banks

	1897	1907	1908	1909
(1) Capital to individual deposits	1:2.93	1:4.82	1:4.94	1: 5.30
(2) Capital to loans	1:3.25	1:5.22	1:5.16	1: 5.43
(3) Capital to aggregate resources	1:5.87	1:9.26	1:9.80	1:10.14
(4) Capital, surplus and other profits to individual deposits	1:1.92	1:2.65	1:2.69	1: 2.87
(5) Specie and legal tenders to individual deposits	1:5.35	1:6.16	1:5.24	1: 5.87

[Report of the Comptroller of the Currency, 1909, p. 7.]

(a) What is indicated by the fact that ratios (1), (2), and (3) all increased decidedly between 1897 and 1907? What was the source of this capital? (b) What difference in significance, as for protection given to depositors, obtains between ratios (1) and (4)? (c) Account for the change in ratio (5) before and after the panic of 1907. (d) If ratio (1) differs much from ratio (4) what effect does it have upon the protection given to depositors by the double liability of stockholders? (e) Procure data for 1917 and 1926 and complete the Table. What changes are noteworthy during the past two decades?

307. Cost of Operating National Banks, 1902

(000 omitted from amounts)

Classification	No. of Banks	Capital Stock	Cost of Operation, Exclusive of Taxes	Average Amount of Loans and Discounts	Percentage of Cost of Operation to Loans and Discounts	Average Rate of Interest Received on Loans	Excess of Interest Rate above Expense Rate
Banks with capital of:		$	$	$	%	%	%
$1,000,000 or over..	102	167,205	13,991	1,051,957	1.33	5.17	3.84
500,000 or over..	149	82,242	7,267	399,587	1.82	5.82	4.00
200,000 or over..	551	140,001	12,595	618,101	2.04	6.26	4.22
100,000 or over..	1,196	132,343	12,159	520,648	2.34	6.83	4.49
25,000 or over..	1,541	83,142	8,526	307,221	2.78	7.40	4.62
25,000	291	7,275	838	19,701	4.26	7.75	3.49
Total	3,830	612,211	55,379	2,917,218			

[Report of Comptroller of the Currency, 1902, p. 43.]

(a) What relation is shown to obtain between size of bank and cost of operation? Give reasons? (b) What relation is shown to obtain between size of bank and interest received on loans and discounts? How does location of the big banks affect this relationship? (c) Which size of banks operate on the narrowest margin of profit? How is margin of profit related to location of banks? Does the scale of margin of profit indicate that competition is keener the larger the

banks? (d) Were there any conditions in the year ending March 1, 1902, that made the above figures exceptional?

308. Operating Costs and Profits of Member Banks with Branches in First Federal Reserve District

The following table shows the operating costs and profits of member branch banks in the First Federal Reserve District for the year 1924:

OPERATING COSTS AND PROFITS OF MEMBER BANKS WITH BRANCHES IN THE FIRST FEDERAL RESERVE DISTRICT, 1924

	Group I. Loans and Investments under $10,000,000 Average 13 Banks		Group II. Loans and Investments $10,000,000 to $50,000,000 Average 13 Banks		Group III. Loans and Investments over $50,000,000 Average 6 Banks	
PERCENTAGES OF LOANS AND INVESTMENTS	$	%	$	%	$	%
Interest and discount earned	174,204	3.2	1,096,446	5.2	5,548,000	4.6
All other earnings	17,339	.3	198,200	.9	1,249,383	1.1
Gross earnings	191,543	3.5	1,294,646	6.1	6,797,383	5.7
Salaries and wages	32,148	.6	254,331	1.2	1,218,300	1.0
Interest paid on deposits	76,713	1.4	488,239	2.3	2,860,300	2.4
Interest paid on borrowed money	1,734	(b)	12,769	.1	20,017	(b)
Rent, taxes and other expenses	35,787	.7	221,546		915,016	.8
Total current expenses	146,382	2.7	976,885	4.6	5,013,633	4.2
Net earnings	45,161	.8	317,761	1.5	1,783,750	1.5
Net losses charged off	12,413	.2	78,200	.4	854,833	.7
Dividends paid	17,717	.3	141,115	.7	1,011,667	.8
Net reserves and surplus	15,031	.3	98,446	.4	82,750[a]	.1[a]
PERCENTAGES OF GROSS EARNINGS						
Interest and discount earned	174,204	90.9	1,096,446	84.7	5,548,000	81.6
All other earnings	17,339	9.1	198,200	15.3	1,249,383	18.4
Gross earnings	191,543	100.0	1,294,646	100.0	6,797,383	100.0
Salaries and wages	32,148	16.8	254,331	19.6	1,218,300	17.9
Interest paid on deposits	76,713	40.1	488,239	37.8	2,860,300	42.1
Interest paid on borrowed money	1,734	.9	12,760	1.0	20,017	.3
Rent, taxes and other expenses	35,787	18.6	221,546	17.1	915,016	13.5
Total current earnings	146,382	76.4	976,885	75.5	5,013,633	73.8
Net earnings	45,161	23.6	317,761	24.5	1,783,750	26.2
Net losses charged off	12,413	6.5	78,200	6.0	854,833	12.5
Dividends paid	17,717	9.2	141,115	10.9	1,011,667	14.9
Net reserves and surplus	15,031	7.9	98,446	7.6	82,750[a]	1.2[a]
OTHER RATIOS						
Earnings after losses to capital and surplus		7.7		8.7		5.2
Net earnings to capital and surplus		10.6		11.5		10.0
Net earnings to cap., sur. and dep.		1.3		1.3		1.2
Cap. and sur. to gross deposits		13.8		12.6		13.8
Time to gross deposits		38.3		25.9		24.8
Earnings after losses	753,200		3,114,200		5,573,500	
Capital and surplus	9,813,000		35,864,000		106,914,000	
Net earnings	1,038,700		4,130,900		10,702,500	
Capital, sur. and dep.	81,102,000		321,723,000		879,416,000	
Gross deposits	71,287,000		285,459,000		772,502,000	
Time deposits	27,336,000		74,018,000		191,572,000	
Loans and investments	71,748,000		277,531,000		722,383,000	

[a] Net withdrawals from reserves. (b) Less than one-tenth of one per cent.

The following statement (1) was made regarding this class of banks:

"The ratio of gross earnings to loans and investments in 1924 in the smallest group of banks with branches was low; total expenses

were relatively much lower in this group of branch banks, and net earnings correspondingly low. Net losses were charged off . . . and consequently the amount of net earnings carried to reserve in the smallest group of branch banks was relatively low.

In the two larger groups of the banks with branches, in 1924, there was very little difference in ratios of gross earnings, expenses and net earnings to loans and investments. However, losses charged off in 1924 by the branch banks were heavy with the result that the proportion carried to reserves was very low in the middle sized group of branch banks, while in the largest group there was a slight withdrawal from reserves.

As far as it is safe to generalize from so small a number of banks, it appears to be the case that net earnings of banks with branches do not differ greatly from those of the groups of large banks which contain banks both with and without branches; however, losses taken are generally heavier, with the result that the amount carried to reserves is relatively low.—[The table and statement were prepared by Esther G. Tomkins from material supplied by the Federal Reserve Agent of the Federal Reserve Bank of Boston.]

(a) Make a careful study of the table in this problem. Do you agree with the analysis given above? (b) Are branch banks more or less profitable than the banks as a whole? Would this justify a general conclusion as regards branch banks as a whole in this country? Why? (c) Are large branch banks more or less profitable than smaller branch banks? (d) Are net losses greater among branch banks than among all banks as shown by the table in Problem 305?

309. Function of Surplus

The intention of the law in providing for a surplus fund seems to be to afford to shareholders a protection against assessments. Such protection is valuable to all shareholders who are not capitalists, and who, therefore, presumably are not prepared to respond to assessments upon their shares, but it is of vital importance to small investors and to the beneficiaries of trust and estate funds invested in national bank stock.

The surplus fund stands between such shareholders and their wealthy partners as a safeguard against the process commonly known as "freezing out." Without this protection improvident or designing directors would constantly be exposing their shareholders to assessments, and on every such occasion the weak and helpless would be sacrificed, while their stock would pass into the hands of the designing or the grasping.—[Report of the Comptroller of the Currency, 1888, p. 73.]

(a) The larger the surplus, the safer the depositors, at least as against ultimate payment: explain. (b) The larger the surplus, the safer the minor stockholders as against the controlling interest of the bank: explain. (c) Does the surplus fund consist of cash? Is it in the nature of a cash reserve against deposits? Is it a part of the reserve, or is the reserve a part of it?

310. Dividends of National Banks

The directors of any national banking association may, semi-annually, declare a dividend of so much of the net profits of the association as they shall judge expedient; but each association shall, before the declaration of a dividend, carry one-tenth of its net profits of the preceding half year to its surplus fund until the same shall amount to 20% of its capital stock.—[Rev. Stat. U. S., sec. 5199.]

(a) May a national bank declare quarterly dividends? annual dividends? stock dividends? (b) May dividends be declared from surplus? (c) Where the earnings properly applicable to a dividend are ample for such purpose, and the directors, or a majority of them, acting in bad faith and without reasonable cause, refuse to declare a dividend, may stockholders compel the directors to declare a dividend? (d) Suppose an insolvent bank declares and pays a dividend out of capital, may depositors recover the dividend from the stockholders receiving the dividend?

311. National Banks and Stock Dividends

The following quotation shows the stock dividend record and the growth in the capital of the Atlantic National Bank of Jacksonville, Florida, since it opened for business in 1903:

Jacksonville Bank Increases Capital

The board of directors of the Atlantic National Bank, Jacksonville, Florida, have recommended to the stockholders the payment of a stock dividend of about 43 per cent., increasing the capital from $1,400,000 to $2,000,000. After the increase, the surplus and undivided profits will stand at $700,000. The Atlantic National, with its affiliated institutions, the American Trust Company and the Fairfield, Springfield and Riverside Atlantic Banks, will have combined capital resources of over $3,000,000.

The Atlantic National Bank opened for business on August 1, 1903, with capital of $350,000, at a time when the population of Jacksonville was only 30,000. The original stock was increased on December 28, 1922, by the declaration of a stock dividend of 300 per cent., which, added to the present stock dividends, makes a total of 471 per cent. in stock dividends paid on the original stock, since organization.

The bank has recently completed a ten-story annex to its building, and has almost completed two new branch buildings.—[*The Bankers Magazine*, January, 1926, pp. 186-187.]

(a) Was the declaration of a stock dividend permitted under authority of section 5142 of the Revised Statutes of the United States? (b) Explain how the same results were obtained without calling it a stock dividend. (c) What is meant in this quotation by affiliated institutions? Is this a so-called chain of banks? (d) How does the profitableness of this bank compare with all national banks as a group?

CHAPTER XIII

BANK ORGANIZATION, CONSOLIDATION AND REGULATION

312. Charter Period of National Banks

Under the present law national bank charters are issued for a term of 99 years. Very frequently banks are offered trust business where the date of the expiration of the trust extends beyond the date of the expiration of the bank's charter. Representatives of these trusts, in many cases, have felt that it was imprudent to have the trust administered where such a condition existed. This has resulted in great embarrassment to all national banks which operate a trust department, and in many cases has resulted in the bank withdrawing from the national system, as very frequently this business is quite profitable and desirable to the bank. It is suggested, therefore, that the national bank act should provide that a national bank be permitted to operate under an indeterminate charter.

There has been some slight misconception as to the effect of this recommendation, in the belief that certain irrevocable privileges would be given in perpetuity if a perpetual charter were granted to a national bank. An indeterminate charter, however, is not a perpetual charter. No bank could exercise any rights under it which are not revocable at the will of Congress, and, furthermore, the charter would be subject to cancellation under the conditions of the act itself. All of the conditions which would justify the refusal by the Comptroller of the Currency to granting a new charter to any group in possession of an expiring charter would justify him in applying to the courts for cancellation of the charter of an operating bank if it were operating under an indeterminate charter.—[Report of the Comptroller of the Currency, 1924, p. 6.]

(a) What was the length of the charter period of the First Bank of the United States? of the Second Bank of the United States? of the national banks under the Act of 1864? of 1882? of 1900? When was the Act passed authorizing 99-year charters? (b) What functions were conferred on national banks that made a 20-year charter a handicap? Is a perpetual charter necessary for the trust functions? (c) What is the purpose of Congress in limiting the charter period? Was the short period more logical in the early history of the national banks than now?

313. Extension of Charters of National Banks for 99 Years

The act of July 1, 1922 repealed all laws or parts of laws relating to extension for a period of 20 years, amended section 5136, authorized

99-year charters, and automatically extended the charters of all existing national banks for 99 years.

(a) The House favored perpetual charters; the Senate 99-year charters: why was there division on this point? [S. 3255, and H. R. 9527.] (b) Certain states granted perpetual charters: did this argue for perpetual charters for national banks? [Only six states had as short charters as 20 years, 21 had perpetual charters, 1 had 100 years, 1 had 99 years, 14 had 50 years, etc.] (c) The Federal Reserve Act authorized national banks to undertake fiduciary functions: why is it desirable for fiduciary institutions to have long charters? (d) When a bank took out a new charter it was necessary to recall its outstanding notes and issue new ones, from new plates: from the beginning of the national bank system it has been necessary to destroy 9,000,000 sheets of paper for this reason, the cost of paper and printing for the government being $139,125 alone; the national banks have many additional costs, such as the making of new plates. Make an argument from this for perpetual charters. (e) The reasons existing in 1863 for limiting charters to 20 years no longer exist: what were they? (f) If Congress once grants the privilege of perpetual charters to national banks and the Comptroller of the Currency grants a charter to a bank, is it irrevocable? (g) How was section 5136 changed by the passage of the so-called McFadden-Pepper Bill?

314. Bank Mergers and Consolidations in the United States from 1910 to 1924, inclusive

During the period since the close of the World War in 1918, there have been many changes in banking in this country. One movement which has received but little attention until the past two years is that of banking mergers or consolidations (referred to in some foreign countries as amalgamations). In some states this movement has been very closely associated with the development of branch banking. In some states like Oklahoma, Kansas, Texas and Minnesota, the list of bank mergers is large though branch banking is not permitted. The number of bank mergers in this country before and during the war was quite marked, though of course the movement has taken on new impetus since the war. The following table shows the number of banks, the number of mergers and total resources of banks, both before and after the merger.

(a) What is a bank merger? Why are the resources generally larger after the merger? (b) Account for the rapid increase in the number of mergers since 1918? (c) Are the causes for bank mergers the same in the following states: Louisiana, Oklahoma, New York, California and Minnesota? Explain. (d) What is likely to be the

TABLE SHOWING THE NUMBER OF BANK MERGERS IN THE UNITED STATES INCLUDING DATA ON ALL BANKS INVOLVED IN THESE MERGERS

Year	No. States	No. Mergers	No. Banks	Total Resources of All Banks before Merger	Total Resources of Banks after Merger
				(000,000 omitted)	
1910	40	126	253	861	913
1911	40	115	232	668	697
1912	41	135	273	1,728	1,632
1913	39	113	224	500	502
1914	42	145	294	876	863
1915	42	146	294	571	627
1916	41	136	275	389	434
1917	44	125	250	1,001	1,091
1918	43	113	224	1,106	1,173
1919	44	178	359	1,995	2,118
1920	45	172	343	3,505	5,193
1921	47	278	543	4,086	4,351
1922	47	296	611	3,377	3,762
1923	46	291	585	4,323	4,772
1924	47	315	622	3,147	3,296

effect of this movement upon the size and number of our banking institutions? (e) What, if any, are the advantages of a large bank over a small one? disadvantages?

315. Reasons for Bank Merger

This department during the past four years has adhered strictly to the policy of permitting new organizations only in cases where they appeared to be fully justified. In my report for the year ending December 31, 1924, I presented, in connection with the organization of new banks, the following comments:

During the year 1924, the department rejected applications for the organization of additional institutions in various portions of the state. In some instances, however, other applications have been approved.

I am strongly convinced that local financial interests will be best served where we have fewer and better banks. Many of the states, where failures were more numerous, have exercised a liberal policy and have issued charters permitting banks to engage in business where there was no necessity or demand. To be successful, a bank must be favored with a volume of patronage. This patronage is not available unless the banking facilities are in demand. With this condition fully demonstrated, the department of this state has refused to issue charters or permit additional banking institutions to engage in business, unless there was a demand for public convenience and a sufficient volume of business available to make the institution profitable.

Continued experiences have developed a firm conviction relative to the soundness of this policy. Unless there should be some material change in

the physical conditions, or unless there should be a wide departure from the present policies maintained in this state, the department will look with disfavor upon the establishment of any new institutions.

There are a number of banks in this state which are conducting business at a loss. The department has worked religiously on several cases for the purpose of bringing about consolidations. There are several locations within the state containing two or more banks. With the distribution of deposits on the present basis none of these institutions are operated at any substantial margin of profit. The best solution, therefore, is to bring about consolidation. This will assemble deposits, increase the earning power and eliminate the excessive overhead involved by operating two or more institutions where the same volume may be conducted under one organization with practically the same expense.—[Eighteenth Annual Report, Superintendent of Banks, Oregon, 1925, pp. 9-10.]

(a) Do you approve of permitting new banks to be organized with a capital of less than $50,000? (b) Explain why you do or do not agree with the Superintendent of Banks in Oregon in restricting or limiting the number of new banks. (c) Should institutions which are being operated at a loss be liquidated, or should they be merged with some other institutions as indicated in the quotation above? (d) Comment on the statement: "This will assemble deposits, increase the earning power and eliminate the excessive overhead involved by operating two or more institutions where the same volume may be conducted under one organization with practically the same expense."

316. Relation of State Bank Officials to the Financial Institutions under Their Supervision

Each statement shows the substance of the legal provisions in a particular state regarding the relationship of the state banking officials to the institutions under their supervision:

1. The chief officer of the banking department must not be "interested" directly or indirectly in any bank or trust company. No member of the banking department may become indebted to any bank under his supervision.

2. The superintendent of banks may not be, during his term of office, an officer or employee of any bank or private banker, may not be "either directly or indirectly interested in any bank," nor carry on business as a private banker. He shall not be or become indebted "directly or indirectly" to any bank. The same requirements apply to all members of the staff of the department.

3. There are no provisions regarding his right to borrow from banks or to have an interest in them.

4. It is unlawful for any official or clerk in the state department of banking to borrow from a bank subject to its jurisdiction.

5. The commissioner and his examiners may borrow from banks but examiners may not make examinations of the banks which have made loans to them.

6. No commissioner, nor his deputy shall examine any bank in which he is a stockholder or in any way financially interested. There is no provision to forbid them to borrow from the banks.

7. Neither the commissioner nor any other member of the department may become indebted, directly or indirectly, to any bank under his supervision or subject to his examination, nor may he be a director, officer or employee of any bank, nor may he be interested in the sale of securities as a business.

8. Neither the commissioner nor any employee of the department may become indebted to any banking institution nor engage in the sale of securities nor in negotiations of loans for others; neither the commissioner nor any other examiner may examine a banking institution in which he is interested as a stockholder, officer, employee or otherwise.

9. There are no provisions in the law forbidding him to borrow from state banks, but this is against the established policy except on mortgage loans. He must not be an officer, or directly or indirectly interested in any national bank, or in any bank, trust company, corporation, business, or occupation that requires his official supervision, and he must not engage in any other business.

10. The commissioner must have had not less than five years experience as a banker, during his term of office must hold no other public office and must not be a stockholder, director, assignee, or employee of any financial institution named in the laws "within or outside of the state."

11. No member of the department shall have "any interest" in any bank or shall be indebted to any bank, or interested in the sale of securities or the securing of loans for others.

12. There is no law which prohibits the chief examiner (superintendent) nor any of the assistant examiners from borrowing from the banks over which they have supervision.

(a) What reasons can you give why a superintendent should not be allowed to retain bank stock after becoming a state official? (b) What effect do such requirements have on the kind of man who will accept the office? (c) Why should examiners not borrow from banks under their supervision? (d) Why do some laws make no restrictions and others prohibit superintendents from borrowing altogether from the banks under their jurisdiction? (e) Rank the above states on the basis of the severity of their restrictions.

317. Voluntary Liquidation of National Banks

On October 17, 1923 the Comptroller of the Currency gave out the following statement to the press: "Voluntary liquidation—The American National Bank and Trust Company of Dayton, Ohio, $200,000, absorbed by the Merchants National Bank and Trust Company of Dayton; The Delta National Bank, Delta, Colorado, absorbed by the Colorado State Bank of Delta."

(a) Outline the procedure which these banks would have to carry out in order to go into voluntary liquidation. Is it the same in both cases? (b) Independently of the above quotation, assume that the last examination of the Comptroller of the Currency revealed the fact that the capital stock of the bank had become impaired. By what two methods may the bank get out of this embarrassed position? (c) Could the matter be adjusted if a few small stockholders refused to participate in the plan adopted? (d) Would such steps be taken necessarily at the expiration of the bank's charter?

318. Abolition of the Office of the Comptroller of the Currency

The assumption in the above is that the Federal Reserve Board would possibly appoint, and certainly have under its control, a single individual exercising powers to a certain degree analogous to those at present attaching to the office of the Comptroller of the Currency. An arrangement of this kind seems to me the only one which is conceivably practical. The suggestions, however, usually take the form of having the Federal Reserve Board, as a board, assume the functions of the Comptroller of the Currency. All of the arguments against the type of comptroller who would act in such a capacity would apply with equal force if the board attempted, as such, to perform these duties. There are, however, additional reasons why it would be impossible for the board, either directly or through a subcommittee, to act in this capacity. The office of the Comptroller of the Currency has been in existence for 60 years, with all of the responsibilities and duties vested in a single person. Around this office have grown up traditions, customs, and precedents based upon rulings and decisions. These have become so fundamentally integrated with the operation of national banks and with the person of the comptroller that it would be impossible, as a practical matter, to attach them to the board or to a committee of the board. Many of these precedents have been established through opinions of the Supreme Court of the United States. The court has referred to the comptroller as a person possessing a quasi-judicial status. What would become of these precedents and decisions if the office of the Comptroller of the Currency were abolished? In other words, if the opinions of the Supreme Court and the rulings of the comptroller's office are based on the general theory that the comptroller is a single person, exercising quasi-judicial, as well as executive powers and it were attempted to transfer those powers to a board, would not these precedents and rulings be seriously disturbed? Whoever takes over the powers and duties of the Comptroller of the Currency must, as a legal and administrative necessity, also take over the status of the comptroller as

evolved by customs and precedents and as interpreted by the courts. This can only be done by an individual. The office itself, therefore, could not be abolished or be transferred to a group of individuals without annuling the fundamental purpose of the national bank act and thereby disrupting the national banking system.—[Report of the Comptroller of the Currency, 1923, p. 22.]

(a) What are the arguments advanced for the abolition of the office of the Comptroller of the Currency? (b) If his office were abolished what are the reasons for settling the functions upon the Federal Reserve Board? (c) Would the state banks members of the federal reserve system be in a better or a worse position if the Comptroller's functions were assumed by the Federal Reserve Board? (d) Is it better to have the bank examinations done by the Comptroller of the Currency who occupies a somewhat independent or anomalous position, rather than by the Federal Reserve Board?

319. State Supervision of Banks

The following statements give the essential points obtained from interviews with certain state superintendents of banks:

1. The banking department is financed out of the general funds of the state treasury. Assessments and fees are made against the banks but these are turned over to the state treasurer and become a part of the general fund. Funds available to the banking department are insufficient for the superintendent to perform his duties adequately and efficiently, e.g., examination, reports, etc. He says that the banking department should be supplied with the regular counsel and advice of an attorney. Regrets were expressed that the staff salaries were so low and that the superintendent's would be even lower next term. It is practically impossible to secure and retain competent men. All of his examiners were under contract for the remainder of the present superintendent's term.

The superintendent of banks does not have supervision over other institutions. It is lawful for him to borrow from banks over which he has supervision. He is appointed by the governor, but selects his own staff.

2. Recently there was created a state banking department with a superintendent of banks at its head. This officer is appointed by the governor and paid a salary out of the general funds of the state. All fees for examination of banks are turned into the general state fund and the expenses of the banking paid therefrom. Funds are regarded as insufficient. The law requires two examinations per year of banks and building and loan associations. The superintendent states that his number of examiners is too small to properly examine the banks as required by law. Examiners are appointed by the superintendent

subject to the approval of the governor. Special deputies are appointed to liquidate each failed bank. There is also a local attorney for each failed bank.

(a) Why are the fees and assessments turned into the general state fund and not used directly by the banking department? (b) Should state superintendents of banks be appointed by the governor or elected by the voters? (c) Do you think each state banking department should have a competent attorney attached to the staff? Why? (d) What objections can you give against paying each examiner a fee for each bank examined?

320. Interest Rates and Usury

The State Banking Law of North Dakota (1925, p. 185, chapter 155) makes the following provisions regarding the interest rate and usury:

Legal Rate Six Per Cent. Interest for any legal indebtedness shall be at the rate of six per cent per annum, unless a different rate not to exceed nine per cent per annum is contracted in writing and all contracts shall bear the same rate of interest after they become due as before.

Usury Defined. No person, firm, company or corporation shall directly or indirectly take or receive, or agree to take or receive in money, goods or things in action or in any other way, any greater sum or any greater value for the loan or forbearance of money, goods or things in action, than nine per cent per annum, and in the computation of interest, the same shall not be compounded. Any violation of this section shall be deemed usury.

(a) Is the 6% the legal interest rate for most states? Which, if any, provide for a higher or lower rate? (b) Would the taking of 9% interest in advance be regarded as usurious in North Dakota? (c) Are long-term loans evidenced by written contracts, specifying that interest at 6% is payable in advance and the principal is payable in quarterly installments, usurious in North Dakota? If the loan rate specified were 9% would the contract be usurious?

321. The Functions of Supervisory Examiners under the Comptroller of the Currency

The advantages to be secured (from the employment of supervising examiners):

1. That banks may be specially examined at any point of time between the dates of ordinary examination without exciting alarm in the community and without reflecting upon the management. Such intermediate examinations are often very desirable in order to clear up doubtful inferences from reports of examiners and reports of condition, and to set at rest apprehensions excited by cummunications reaching the Comptroller's office. . . .

2. The visits of the supervising examiner will afford to the banks,

especially those in remote localities, a protection which they can not now receive against arbitrary or otherwise improper conduct on the part of the local examiner, and will also protect both the banks and the public against injury in case the local examiner proves to be inattentive, incompetent, or corrupt.

3. Supervising examiners will carry with them all over the Union a knowledge of correct and uniform methods of business, and, if properly selected, will possess the capacity of instructing both the local examiners and the officials of the banks in respect to these matters. . . .

4. Supervising examiners will have circuits beginning and ending with the office of the Comptroller, and they will supply a means by which this officer can obtain definite and comprehensive information about banking interests in remote sections and about the local examiners. . . .—[Report of the Comptroller of the Currency, 1887, p. 10.]

(a) Obtain the latest report of the Comptroller of the Currency and discover the plan of organization of the examiners. Note the classes of examiners. Note the number and boundaries of the districts. (b) What are the differences of functions of the local and supervising examiners? (c) What is the salary of the bank examiners? Is it sufficient to attract able men? (d) What was the organization of the examiners in 1887? What were its weaknesses?

322. Distribution of Violations of National Bank Act

Date of Call	Sec. 5137 Real Estate Loans	Sec. 5191 Reserve	Sec. 5200 Excessive Loans	Sec. 5202 Borrowed Money	Total
1910					
Jan. 31	15.03%	19.91%	16.03%	0.24%	51.20%
Mar. 29	10.52	25.87	16.04	.32	52.75
June 30	11.40	17.68	14.56	.95	44.59
Sept. 1	12.42	22.46	16.40	1.78	53.06
Nov. 10	14.73	22.97	19.21	.58	57.49
1911					
Jan. 7	16.04	23.72	17.47	.51	57.74
Mar. 7	15.37	23.69	16.56	.79	56.41
June 7	16.10	21.38	14.10	1.49	53.07
Sept. 1	15.86	25.54	15.56	2.91	59.87

[Report of the Comptroller of the Currency, 1911, p. 18.]

(a) What were the provisions of the sections of the Revised Statutes of the United States cited above? What penalties were provided by law for violations of each? Were they enforced? (b) When the national bank act was amended by the Federal Reserve Law of 1913, were any of these sections made less severe? Was the

high concentration of violations warrant in itself for mollifying the restrictions of the law?

323. Immunity from Failure of National Banks

In the fiscal year ending October 31, 1893, covering the financial disturbances of that year, 158 national banks suspended, with capital of $30,350,000; 65 national banks with capital of $10,935,000 were insolvent and required the appointment of receivers; 86 national banks with capital of $18,205,000 subsequently resumed business; and 7 national banks with capital of $1,210,000 were placed in charge of examiners with the hope of resumption. The total liabilities of the failed and suspended banks during this period (in the case of failed banks "claims proved" being taken as total liabilities) amounted to $83,042,347. . . .

In the year of unprecedented strain, when our national banks were put to the supreme test—from April 1, 1917, to April 1, 1918, covering the first year from our entrance into the war—the total national bank failures and suspensions amounted to only four, with capital stock of $175,000 and total liabilities ("claims proved" being taken as total liabilities) of $843,050. And one of these four banks, with capital of $50,000 and liabilities of $165,889, was subsequently restored to solvency and resumed business. The proportion of all liabilities of suspended national banks in 1893 to the total liabilities of all active national banks in operation during that year was 2.39%. The proportion of all liabilities of suspended national banks for the war year, from April 1, 1917, to April 1, 1918, to the total liabilities of all national banks in operation during that year was 0.004%

These figures show that the ratio or proportion of the liabilities of suspended national banks in the panic year 1893 was more than 500 times greater than for the year of terrific trial following our entrance into the war, and they bear eloquent testimony to the soundness and efficiency of our national banks and the success of our banking and currency system.—[Report of Comptroller of Currency, 1918, pp. 4-5.]

(a) Is the above method a fair type of comparison to prove the relative immunity of banks from failure in different periods? (b) Consider and evaluate the following factors of relative immunity in the two periods: (1) the character of the years immediately preceding the two tests; (2) the relative degrees of maturity of the country; (3) the balance of trade; (4) the relative decline in the proportion of our total currency composed of greenbacks and silver; (5) the provisions of the federal reserve system, and the uses made of them; (6) the better supervision of the banks; (7) the size of the gold reserve.

324. Efficiency in Handling Insolvent National Banks

See data on page 264.

(a) Do you agree with the Comptroller who stated: "The conspicuous relative reduction in legal expenses is worthy of remark"? What does this indicate as to the process of liquidating national banks? (b) How was it possible to reduce the receivers' expenses by two-

Date of Failure	No. of Failed Banks	Total Collections from All Sources	Legal Expenses		Receivers' Salaries and Other Expenses		Amount of Claims Proved	Percentage of Dividends on Claims Proved
			Amount Paid	Ratio to Total Collections	Amount Paid	Ratio to Total Collections		
		$	$		$		$	
1865 to 1869.....	15	3,870,087	155,959	4.03	343,343	9.13	5,131,694	62.84
1870 to 1874.....	21	10,384,725	299,855	2.89	579,495	5.58	9,876,423	75.61
1875 to 1879.....	41	9,353,476	317,737	3.39	676,526	7.23	9,646,132	72.65
1880 to 1884.....	9	1,534,720	44,561	2.90	109,162	7.11	1,407,231	86.75
1885 to 1889.....	16	3,735,929	30,374	0.81	122,195	3.27	2,483,512	90.65
Total.....	102	28,877,937	848,486	2.94	1,830,721	6.34	28,544,992	74.17

thirds? (c) Do the higher percentages of dividends paid to depositors indicate greater efficiency and economy in conducting the liquidations, or the fact that recent failures were less disastrous than in the earlier years of the system, or both? If the failures are less disastrous is this due to the system of supervision? (d) Using the reports of the Comptroller of the Currency for the past five years, prepare a similar table and determine the expense ratios and dividends ratios, and compare the effectiveness and economy of the Comptroller nowadays with the ones of the '80s.

325. Causes of Failure of National Banks

The following table shows the distribution of insolvent national banks from 1865 to October 31, 1911:

Causes of Failure	Per Cent	
Criminal violations of law:		
Defalcations	6.96	
Fraudulent management	22.63	
Wrecked by cashier or other employee	6.77	36.36
Other violations of law:		
Excessive loans	20.70	
Investments in real estate and mortgages	2.71	23.41
Other causes:		
Injudicious banking	23.01	
Shrinkage in values	9.67	
Depreciation in securities	3.29	
Failure of debtors	2.32	
Closed by or in anticipation of run	.78	
Receiver appointed after voluntary liquidation	.58	
Cause not indicated	.58	40.23
		100.00

[Report of Comptroller of the Currency, 1911, p. 27.]

(a) Does the above table illustrate the saying that the strength of a bank lies not in its vaults, its reserves, or its loyal depositors, but in its officers? (b) Does the above table argue for a system of

government regulation of banks, such as we have under our Comptroller of the Currency, or for freedom from supervision as in England? What fundamental differences in American and English banking render supervision less necessary in England? (c) Is the above table an indication that our banking criminal code is too severe or not severe enough? (d) Against which of the above causes of failure may a bank insure itself through surety or other insurance companies?

326. Method of Handling Failed Banks

The large number of banks which have failed in the United States during recent years makes the subject one of the big current problems of banking at the present time (1927). The methods employed in handling the affairs of failed banks vary considerably from state to state. The following extracts from various laws show the legal provisions in fourteen different states. These fourteen states will, it is believed, set forth the general and varied practice of the country as a whole:

1. Receiverships for failed banks are abolished (since 1913). The commissioner takes over the property of an insolvent bank and proceeds with the liquidation under the supervision of the district court, the expenses being paid by the bank. (Colorado Banking Law.)

2. In cases of insolvency, the commissioner prefers a complaint to the judge of the superior court of the county; whereupon the judge, after the hearings, appoints receivers, who, however, render an annual report to the commissioner and oftener if required. (Connecticut Banking Law, 1919.)

3. The Comptroller appoints the receiver where liquidation is necessary. All expenses of liquidation are met out of the assets of the bank. (Florida Banking Law, sec. 4162.)

4. The superintendent takes possession of an insolvent bank and acts as receiver, personally or through his agents. The expenses of liquidation are fixed by the superintendent, subject to approval by the court. No suit for the forfeiture of the charter of a bank or for liquidation or the appointment of a receiver may be instituted by any person except by the superintendent of banks. (Georgia Banking Law, Art. IV.)

5. In cases of insolvency, the commissioner petitions the court for the appointment of a receiver. (Indiana Banking Law, 1925, Ch. 14.)

6. The superintendent of banking acts as sole receiver for insolvent banks, by appointment of the court. (Iowa.)

7. In case of the apparent insolvency of a bank, or of unlawful practices, the commissioner takes charge of the bank, and as soon as

the fact of insolvency is confirmed by investigation, he appoints a receiver, whose compensation is subject to approval of the court. The receiver operates under the direction and supervision of the commissioner. Every bank in hands of a receiver must be examined at least once in six months, and receivers of banks must report to the commissioner in the same manner as banks in operation. Pending the appointment of a receiver, the commissioner may appoint a special deputy bank commissioner to take charge of the bank, who shall not, however, remain in charge of the bank for more than six months. If the holders of more than 50 per cent of all claims against an insolvent bank agree upon one person as a receiver, the commissioner is required to appoint him. (Kansas.)

8. In case of insolvency of a bank or of a credit union, or of unlawful practices, the superintendent proceeds to its liquidation and acts as receiver. (Mississippi, L. 1922, Ch. 172, secs. 21-23: L. 1924, Ch. 1777, sec. 8.)

9. In case of insolvency or unsafe condition of a corporation under the jurisdiction of the commissioner, he is required, with the consent of at least one other member of the Board of Bank Incorporation (which consists, in addition to the bank commissioner, of the general treasurer and of the attorney general) to take possession of the corporation, and he may apply to the court for the appointment of himself, or of the deputy commissioner, as receiver. (Rhode Island C. L., Ch. 274, sec. 7.)

10. In cases of insolvency or whenever necessary the commissioner takes possession of banks until business is resumed, or its affairs liquidated, unless the (Rev. Stat., 1922, Ch. 1, sec. 21) stockholders appoint their own liquidating agent, in which case the commissioner is discharged from further liability. (Wisconsin Rev. Stat., 1922, sec. 2022-10.)

11. The superintendent of banks takes possession of insolvent banks and proceeds to liquidate its affairs. In cases of necessity the court may appoint a temporary receiver to act until the bank is taken over by the supervisor. (Washington, L. 1917, Ch. 80, secs. 69, 70.)

12. In case of insolvency of a bank or of dishonest or unsafe practice, the state bank examiner may, upon consultation with the state treasurer and on order obtained from the court, take possession of the bank, and he is required to apply to the court for the appointment of himself, or of another person as receiver. (South Carolina B. L., sec. 98.)

13. In cases of insolvency, the examiner takes possession of the bank and reports its condition to the attorney general, who petitions

the court to appoint the examiner as receiver. (New Mexico, Act 1923, sec. 49.)

14. In case of unlawful or unsound practice, of impairment of capital, of insolvency, of non-compliance with orders of the superintendent or of refusal to submit to examination, the superintendent may take possession of a corporation or private banker under his jurisdiction and act as a receiver, directly or through deputies, unless he is enjoined from doing so by the Supreme Court. (B. L., secs. 57-81.) He may likewise take possession of a savings and loan association which has failed to pay matured shares or withdrawals for two years. (B. L., sec. 59.) The superintendent may also report the delinquencies of a banking corporation to the attorney general, who may institute action to procure a judgment dissolving such corporations. (New York B. L., sec. 59.)

(a) How do you account for the wide differences in the method of handling failed banks? (b) What is the essential difference between the practice in the state of Connecticut and the state of New York? (c) Compare the practice in Rhode Island with that in Kansas. (d) If you were drafting a uniform bill for handling failed banks, or banks in difficulty, what provisions would you include regarding the appointment of receivers and the power given to the state banking officials?

327. Frequency of State Bank Examinations

The state banking laws of the different states usually provide that the state superintendent of banks, or chief state banking officials, shall make a minimum number of examinations each year of the financial institutions under their general supervision. This minimum number is generally determined by the state banking law. The number required varies from state to state. The situation is fairly accurately set forth by the following statements regarding twelve different states. The states have been selected at random but represent different geographical sections of the country.

1. All banks under the supervision of the department are subject, by law, to at least one examination during each year and extra examinations at the discretion of the superintendent. (California.)

2. The law requires savings banks to be examined at least once a year, and every other bank and building and loan association at least twice a year. (Arizona.)

3. In 1923, the department made one examination of 402 banks, two examinations of 264 banks and three examinations of two banks, making a total of 669 examinations for banks. All building and loan

associations were examined once per year as required by law. (Arkansas.)

4. Every bank is examined at least twice a year, not at stated or regular times. In addition special examinations are made when necessary. (Georgia.)

5. The law requires that two examinations of each bank be made by the department. (Idaho.)

6. The number of examinations to be made by the department is not specified by law, but is left to the discretion of state banking commissioner. (Indiana.)

7. Each bank must be examined at least twice a year, at irregular intervals and without prior notice. (Mississippi.)

8. By law examinations are made of all banks under the jurisdiction of the department at least once a year. The practice is, however, to examine all banks and building and loan associations twice a year. The commissioner may accept the audit of a certified public accountant in lieu of the required examination of credit unions with assets of less than $25,000. (Minnesota.)

9. Each bank must be examined at least once a year, and the commissioner may make any such special examinations as he deems advisable, and he is required to make examinations upon the sworn application of five or more officers, trustees, creditors or depositors of a bank.

Examinations of banks which are members of the federal reserve system are made with the participation of federal reserve examiners. (Massachusetts.)

10. For those banks which are members of the federal reserve system, the examination of the federal reserve examiner, or for any bank, the examination by a certified public accountant may be accepted by the commissioner as sufficient substitute for the examination by the state department. (Delaware.)

11. Every commercial, savings, and industrial bank is examined at least twice a year. Trust companies are examined once a year and also when requested by their board of directors.

No person may be appointed to examine a bank in which he has an interest as a stockholder, officer or employee or otherwise. The examinations of the department are accepted without question by the federal reserve bank. (Michigan.)

12. All banks and trust companies are examined at least twice a year, as well as such private bankers as operate under an authorization of the department.

Other corporations under the supervision of the department and

personal loan brokers must be examined at least once a year. (New York.)

13. Each bank is required by law to be examined at least once a year without previous notice. Additional examinations may be made. Superintendent required to make special examinations if requested by the board of directors. (Ohio.)

(a) Is there any uniformity in the number of examinations required? (b) What, if any, reason can be assigned in the case of Arizona why savings banks should be examined less frequently than other financial institutions? (c) Should the examination dates in the different states be uniform? (d) Why should not a certified public accountant's examination be acceptable in lieu of an examination by a state banking department? (e) What are the advantages to all parties concerned in having federal reserve banks and state departments make their examination at the same time? (f) Explain the essential purposes of a bank examination.

328. Examination of State Member Banks of the Federal Reserve System

The following quotations and statements have been brought together to show the cooperation between federal reserve banks and state superintendents of banks in making the regular periodical examinations of state banks and trust companies:

1. "While the department has in the past, on occasion, accepted federal reserve examinations of member banks in lieu of our own examinations, it is some time since the Federal Reserve Bank of . . . . . discontinued making ordinary examinations of member banks."

2. Audits made by federal reserve examiners are not accepted by the Banking Department instead of reports made by its own examiners.

3. Examinations of state banks which are members of the federal reserve system are made jointly by the federal reserve examiners and those of the state department.

4. Examinations of banks which are members of the federal reserve are made with the participation of federal reserve examiners.

5. The examinations of the department have been accepted without question by the federal reserve bank.

6. The department generally arranges to make simultaneous examinations with the federal reserve examiner of all banks which are members of the federal reserve bank but does not accept their examination in place of its own.

7. The state department may, in its discretion, accept the examination made by the federal reserve examiners of state banks which are members of the federal reserve system, in lieu of the examinations required by the department.

8. The department may accept the audit of the federal reserve examiners in place of its own for those state banks and trust companies which are members of the federal reserve system.

(a) Do you conclude that examinations by certified public accountants are as general in banking as in other fields of business? Why? (b) What are the reasons for the federal reserve banks (aside from the cost) accepting state examinations in lieu of their own? (c) How do you account for the fact that some state banking departments refuse to recognize an examination by the federal reserve bank of the district? (d) What are the advantages of a joint examination by the state banking department and the federal reserve banks in case of state banks which are members of the federal reserve system?

329. Periodical Reports of State Banks to the Superintendent of Banks

The laws and practice vary considerably between different states regarding the requirements for regular and special reports by state banking institutions to the state banking department. The following six cases represent briefly the requirements in six different states:

1. By law, not fewer than three reports are called by the superintendent each year on the days on which reports are required from national banks by the Comptroller of the Currency. Four reports were called in 1924. Mutual savings banks make two reports to the superintendent per year at stipulated times.

2. Every bank makes an annual report to the commissioner of its condition on the previous 13th day of June. The commissioner may call for special reports when he sees fit.

3. All institutions under the department's jurisdiction are required to make regular periodical reports to the commissioner in a form prescribed by him.

In addition he may require special reports. He is required to call on each bank at least three times a year for a report, without previous notice.

Every bank and trust company is required to make a report to the commissioner, one in five years, on unclaimed deposits, dividends and interest.

Foreign banks licensed in the state are required to make reports to the commissioner at such times and in such form as he prescribes.

4. All banking corporations, trust companies and private bankers operating under an authorization of the department, are required to make reports to the superintendent at least four times a year, and to report annually on unclaimed deposits, dividends and interest.

Savings banks are required to make reports to the superintendent twice a year and also to make such special reports as he may demand.

Investment companies, foreign corporations licensed to operate as investment companies in the state, safe deposit companies, personal loan agencies, savings and loan associations, credit unions, are required to submit an annual report to the superintendent and also to make such special reports as he may demand.

5. Five reports of condition were required by the commissioner of all banks under his supervision 1922, the date of the last report published by the department. In 1924, four reports were called by a letter from the deputy commissioner. Savings banks make annual reports to the commissioner.

6. Every bank is required to make a report to the commissioner at least three times a year, and, in addition, to report to the commissioner within ten days after declaring dividends, the amount of such dividends, the amount carried to surplus, and the amount of net earnings. The commissioner may also call for special reports when he deems them necessary. Four reports were made to the commissioner by banks and trust companies in 1924.

(a) What are the principal reasons for requiring state banking institutions to make reports to the superintendent of banks? (b) Is there any fundamental reason why one state requires only one report, while some other state requires three or four? Is the banking system regarded as being any sounder in those states where several reports are required as compared with the system in a state requiring only one examination? (c) In some cases cited above it will be noticed that savings banks are not required to make as many reports as commercial banks during the course of the year. Account for this difference. (d) Under what conditions would a state superintendent call for additional or special reports? (e) How do the requirements of state laws compare in this respect with those of the National Banking Act?

330. Objection to Fixed Dates of Reports of National Banks

But it is in the large cities, especially in New York, that this plan proves most objectionable. Gold and stock speculators, knowing that at a certain time the banks will make it a point to have a full supply of

lawful money in their vaults, get up combinations for the purpose of producing scarcity of legal tender notes, and a stringent money market, so as to depress the market for government, State, railroad, and other securities. National banks, held firmly to the requirements of the law, are seriously embarrassed by such trickery. Their necessities compel them to have the lawful money at any hazard. . . . Regular commercial transactions are impeded, suspended, or forced to be carried at ruinous rates. . . . It is becoming more manifest, as one quarter succeeds another, that the evil is becoming more and more intolerable. . . .—[Report of the Comptroller of the Currency, 1868, pp. XX-XXI.]

(a) Under the original scheme of the national bank supervision when were reports required? (b) What is meant by "window-dressing"? Illustrate methods of doing it. (c) When and why did the government go over to the plan of the Comptroller's "call," fixing upon some day that is past for the date of the report? (d) What is the objection to procuring reports of condition at irregular intervals? (e) Examine an annual report of the Comptroller of the Currency and find how many calls have been made by him for reports of condition each year. Justify the greater number during the late war. Are three reports per year sufficient now?

331. Purpose of the Examinations of the Comptroller of the Currency

It would appear that the supervision of the national banks by the Comptroller of the Currency was intended originally only to protect the revenue from being defrauded and the public from suffering loss through improper issues of circulating notes, but in the process of time the supervision came to be extended so as to serve as a protection to depositors against the maladministration of directors; and quite recently it has been assumed that examiners are expected to discover the defalcations of cashiers and tellers, fraudulent entries in the books of banks, and false statements of assets and liabilities in cases where the president and directors, or some of them, have failed to make such discoveries.—[Report of the Comptroller of the Currency, 1887, p. 90.]

(a) Can you find in the congressional debates or public documents any proof of this growth of functions of the Comptroller of the Currency? If so, cite the approximate date when the newer functions were added.

332. Failures of Banks Located in Small Centers

Some additional light may be thrown upon the subject of bank failures by a study of the figures published by the Federal Reserve Board in 1925. The Board's study shows that the failed banks were generally small banks located for the most part in small centers. In this connection the Board states:

A classification of the suspended banks, by size of the centers in which the banks were located, shows that, of the banks suspended in 1925, 37 per cent were located in towns with a population of less than 500; 78 per cent were in towns with a population of less than 2,500 and 96 per cent were in towns and cities of less than 25,000 population. In the following table bank suspensions for 1925 are classified for the major geographic divisions of the country, by size of the centers in which the banks were located. The distribution of suspensions, by size of towns in 1924, was similar to that in 1925.—[Annual Report, 1925, pp. 31-33.]

BANK SUSPENSIONS DURING 1925, BY SIZE OF TOWN OR CITY

	Total No. of Bank Suspensions	Number of Suspended Banks in Towns or Cities with Population of—							
		Less than 500	500 to 999	1,000 to 1,499	1,500 to 2,499	2,500 to 4,999	5,000 to 9,999	10,000 to 24,999	25,000 and over
New England States	2	1	....	.....	.....	.....	1	.....	.....
Eastern States	10	1	....	.....	1	.....	.....	2	6
Southern States	171	51	39	21	16	23	9	11	1
Middle Western States	213	86	46	19	23	18	10	5	6
Western States	192	83	42	23	12	13	9	.....	10
Pacific States	24	4	3	4	4	6	3	.....	.....
Total United States	612	226	130	67	56	60	32	18	23
Per cent of total number	100	36.9	21.2	11.0	9.2	9.8	5.2	2.9	3.8
Cumulative per cent of total number	100	36.9	58.1	69.1	78.3	88.1	93.3	96.2	100.0

(a) Account for the fact that there were fewer bank failures in New England and Eastern States than in the Middle and Western States. (b) Why was such a large number of the failures small banks located in small centers? (c) Is this table an argument for higher capital requirements for state banks? What minimum capital should a new bank be required to have before a charter is granted to it?

333. Member versus Non-Member State Bank Failures

SUMMARY TABLE COMPARING NUMBER AND AVERAGE SIZE OF MEMBER AND NON-MEMBER STATE BANK FAILURES

State	Total No. of Incorporated State Banks at Close of 1924	Total No. of Banks Members of Federal Reserve System at Close of 1924	Total No. of Non-member Bank Failures (1920-1925)	Total No. of Member Bank Failures (1920-1925)	Average Resources of Failed Non-member Banks (1920-1925)	Average Resources of Failed Member Banks (1920-1925)	Per Cent of Non-member Bank Failures in Numbers (1920-1925) to Total Non-member Banks at Close of 1924	Per Cent of Member Bank Failures in Numbers (1920-1925) to Total Member Banks at Close of 1924
Alabama	253	22	13	3	$ 97,564	$ 534,667	5.62	13.6
Arkansas	397	36	28	1	237,064	1,056,829	7.76	2.77
Georgia	514	77	135	12	231,683	560,463	30.89	15.58
Idaho	105	32	25	11	335,308	402,304	34.25	34.37
Indiana	721	21	10	2	244,575	344,816	1.43	9.52
Iowa*	1,269	94	117	14	468,772	725,623	9.96	14.89
Kansas*								
Louisiana	210	13	25	1	259,902	395,461	12.32	7.69
Michigan	600	163	1	1	446,943	622,798	.23	.61
Minnesota	1,179	28	142	3	336,408	390,957	12.34	10.71
Missouri	1,456	61	99	2	396,696	806,998	7.10	3.28
Montana	155	35	107	19	231,237	516,085	89.17	54.28
New Mexico	40	2	43	5	309,116	387,931	113.16	250.00
Ohio	666	89	5	1	232,032	1,931,673	.866	1.12
Oklahoma	381	7	148	2	265,250	261,306	39.57	28.57
Oregon	181	38	17	2	615,337	471,718	11.88	5.26
South Carolina	311	18	79	2	351,035	690,681	26.96	11.11
South Dakota	438	14	161	5	345,262	969,223	37.97	35.71
Texas	933	174	119	13	328,504	686,970	15.68	7.47
Utah	96	28	6	3	202,838	375,346	8.82	10.71
Washington	255	45	25	2	532,334	7,157,157	11.90	4.44
Wyoming	71	2	61	2	179,787	490,742	88.405	100.00
Average							26.965	29.604

* Data not yet available.

NOTE.—Data for 1925 is incomplete. The Federal Reserve Board wrote that it did not possess a list of the failed member state banks. The names were obtained by searching through the Federal Reserve Bulletin, and may not be complete. The number of member state bank failures is in all probability an understatement of the case.

There were no member state bank failures in the following states: Arizona, California, Colorado, Connecticut, Delaware, Florida, Illinois, Kentucky, Maine, Maryland, Massachusetts, Mississippi, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Pennsylvania, Rhode Island, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin.

[Hearings before Subcommittee Banking and Currency, U. S. Senate, 69th Congress, 1st Sess. on S. 1782 and H. R. 2, February, 1926, Washington, p. 75.]

(a) Write a description of this table showing whether member or non-member banks have on the average been more susceptible to failure, giving average size and other important points. (b) In which class have the losses been heaviest in proportion to the total number of failures? (c) What, if any, conclusions may be drawn from this table regarding the influence of the federal reserve system on bank failures?

334. Results of Liquidating 167 National Bank Failures—January 1, 1900 to July 1, 1925

RESULTS OBTAINED IN THE LIQUIDATION OF 167 NATIONAL BANKS THAT FAILED DURING THE PERIOD JANUARY 1, 1900, TO JULY 1, 1925

State	Per Cent of Assets Classed as Good, Doubtful, Worthless, and Additional					Per Cent of Collections from Sale of Assets and Assessments on Shareholders			Distribution of Collections in Percentages					
	Per Cent Good	Per Cent Doubtful	Per Cent Worthless	Per Cent Additional	Total	Per Cent from Sale of Assets	Per Cent from Assessments	Total	Per Cent to Loan Creditors	Per Cent to Depositors	Per Cent for Legal Expenses	Per Cent Returned to Shareholders	Per Cent Balance with Receiver	Total
Alabama	44.14	17.64	28.30	9.92	100	86.08	13.92	100	37.40	51.10	11.50	....	....	100
Arkansas	29.66	42.82	7.89	19.63	100	86.61	13.39	100	13.34	76.47	9.32	0.66	0.21	100
Arizona	55.31	23.75	10.69	10.26	100.01	93.53	6.47	100	57.54	30.74	11.72	....	....	100
California	36.37	28.69	22.38	12.56	100	95.29	4.71	100	24.67	66.78	6.13	2.07	.35	100
Colorado	41.54	22.86	24.30	11.30	100	93.79	6.21	100	15.78	77.99	5.98	.13	.11	99.99
Connecticut	52.71	28.23	11.61	7.44	99.99	92.57	7.43	100	21.33	71.18	5.88	1.61	....	100
Florida	38.31	35.88	17.14	8.67	100	83.64	16.36	100	20.30	74.05	5.50	....	.15	100
Georgia	37.79	46.05	6.22	9.94	100	84.06	15.94	100	22.76	61.74	8.68	6.27	.55	100
Idaho	45.47	19.27	19.31	15.95	100	94.88	5.12	100	27.11	64.23	7.80	....	.86	100
Illinois	47.01	37.73	7.75	7.51	100	94.04	5.96	100	27.07	66.99	4.82	1.05	.07	100
Indiana	46.44	21.50	21.01	11.04	99.99	92.85	7.15	100	21.80	71.49	6.29	.41	....	99.99
Iowa	35.16	31.32	19.49	14.03	100	90.74	9.26	100	11.89	77.23	10.53	.26	.09	100
Kansas	36.87	47.87	7.03	8.23	100	95.58	4.42	100	10.09	85.37	4.45	....	.09	100
Kentucky	38.22	34.17	9.43	18.18	100	92.37	7.63	100	12.60	74.54	11.17	1.29	.39	99.99
Louisiana	31.00	33.36	26.05	9.59	100	89.06	10.94	100	31.66	59.73	8.27	....	.33	99.99
Maryland	35.64	40.49	12.78	11.08	99.99	97.56	2.44	100	22.98	68.09	8.28	.65	....	100
Massachusetts	50.50	30.57	10.43	8.50	100	93.04	6.96	100	17.92	74.91	5.70	1.31	.16	100
Michigan	24.79	29.52	28.22	17.47	100	89.05	10.95	100	6.88	80.57	11.77	.66	.12	100
Minnesota	16.27	39.51	17.59	26.63	100	93.18	6.82	100	8.86	80.26	10.47	....	.42	100.01
Missouri	54.51	34.45	8.82	2.21	99.99	97.73	2.27	100	30.17	65.43	4.09	....	.31	100
Nebraska	27.26	48.62	15.35	8.77	100	90.54	9.46	100	26.06	57.48	14.24	....	2.23	100.01
Nevada	12.14	21.36	61.34	5.16	100	69.92	30.08	100	16.36	41.65	41.79	....	.20	100
New Jersey	41.83	28.53	17.11	12.53	100	93.25	6.75	100	19.20	71.37	8.88	.35	.20	100
New York	46.29	39.03	6.05	8.62	99.99	96.84	3.16	100	30.39	65.22	3.12	1.27	.00	101
North Carolina	60.62	25.87	9.61	3.90	100	84.93	15.07	100	32.96	59.78	6.65	.36	.25	101
North Dakota	37.38	21.61	15.47	25.54	100	94.64	5.36	100	18.12	57.10	24.46	....	.32	101
Ohio	35.71	36.92	18.69	8.69	100.01	93.69	6.31	100	11.86	81.84	5.79	.45	.05	99.9
Oklahoma	31.34	30.41	18.83	18.42	100	95.91	4.09	100	30.77	59.01	9.60	.19	.43	100
Oregon	50.23	17.42	7.14	25.21	100	83.34	16.66	100	8.13	78.52	13.35	....	....	100
Pennsylvania	46.41	35.38	9.39	8.81	99.99	94.20	5.80	100	29.62	61.77	4.13	4.45	.03	100
Rhode Island	55.59	23.64	14.59	6.18	100	95.15	4.85	100	14.38	76.97	8.42	....	.23	100
South Dakota	43.39	22.59	14.82	19.20	100	95.30	4.70	100	12.57	73.78	12.23	....	1.42	100
Tennessee	23.06	11.07	39.35	26.52	100	70.35	29.65	100	18.20	70.80	8.40	....	2.60	100
Texas	50.86	27.01	16.11	6.02	100	91.47	8.53	100	17.05	74.06	7.92	.89	.08	100
Vermont	36.60	19.75	29.16	14.49	100	76.78	23.22	100	16.44	74.91	8.65	....	....	100
Washington	35.37	32.41	17.91	14.31	100	94.62	5.38	100	10.21	82.03	7.48	.10	.18	100
West Virginia	46.41	14.31	9.48	29.79	99.99	81.73	18.27	100	3.11	85.01	10.28	1.00	.06	100
Wisconsin	37.76	21.83	30.32	10.09	100	85.59	14.41	100	29.13	58.77	11.90	....	.20	100
Percentages for United States	43.01	33.88	12.95	10.16	100	92.91	7.09	100	22.41	69.85	6.13	1.46	.15	100

[Hearing before Subcommittee on Banking and Currency, U. S. Senate, 69th Cong., 1st Sess., 1926, on S. 1782 and H. R. 2, Washington, p. 102.]

(a) In what states have bank failures been heaviest since 1900? How does this list compare with the same number of states showing the highest percentage of doubtful and worthless paper? What are your conclusions, if any? (b) Account for the fact that depositor creditors are paid 69.85% and loan creditors 22.41%. (c) Write a brief analysis of this table bringing out the most salient points according to your theory of their importance.

335. Losses to Depositors from Bank Failures

Losses of Depositors of National Banks 1865 to 1911

Classification of Failing Banks on Basis of Capital	No. of Banks	Capital (000,000)	Average Dividend Paid Creditors	
		$	%	
Less than $50,000	21	0.6	81.14	
$50,000 and less than $100,000	179	9.5	70.26	
$100,000 and less than $250,000	181	23.8	74.47	
$250,000 and less than $1,000,000	73	27.9	74.24	
$1,000,000 and less than $5,000,000	12	15.5	94.63	
$5,000,000 and over	0	0.0	0.0	
	466	77.2	76.19	average

[Report of the Comptroller of the Currency, 1911, p. 26.]

(a) The safest banks are the very largest: what relation may the following have to this fact: (1) more efficient management; (2) clearing-house examinations; (3) age and experience; (4) metropolitan location; (5) wider distribution, both local and personal, of borrowers; (6) access to cooperative help in time of panic?

(b) The second safest are the small banks: what relation may the following have to this fact: (1) more intimate knowledge by community of the banker and his operations; (2) investment in less volatile assets, ultimately liquidable; (3) greater danger of runs before insolvency proceeds far?

336. Resumption of Business by Closed Banks

(a) Draw up some principles which will constitute a good policy for the Comptroller of the Currency with respect to determining whether to allow a national bank which has voluntarily closed its doors to resume business, once it is rehabilitated by the receiver, or to require that an entirely new bank be organized. (b) Would the circumstances causing its failure make much difference? (c) Would the

prevalence of a panic and depression and general suspension of banks occasion liberality? (d) Under which program would depositors in the failed bank receive dividends sooner? (e) Under which could the elimination of the bad influence of certain factions or certain former officers be best handled? (f) Suppose the assets should enjoy an unexpected appreciation of value, how would it affect the propriety of the old bank being allowed to resume business? (g) Does the suspension of a bank cause it to lose its corporate identity or does that identity continue till its last assets are liquidated? (h) The assets of the insolvent bank having been liquidated and stockholders assessed enough to pay depositors in full, would the remaining doubtful assets be good capital for the resuming bank? (i) Does the general policy of allowing a suspended bank to resume business promote careless banking? (j) Should the suspended bank be liable for the losses sustained in the community by customers on account of the suspension of the bank? (k) In 1907 the banks in many parts of the country restricted the amount a bank would pay a customer on account to, say, $100 per day. Was this legal? Was a depositor morally bound to submit to this limitation?

CHAPTER XIV

FOREIGN EXCHANGE

337. The Balance of Trade of the United States

In a general way it may be said that the trade balance of this country before 1914 passed through the following cycles:

1. 1789-1837.....unfavorable balance
2. 1738-1849.....favorable balance
3. 1850-1873.....unfavorable balance
4. 1874-1914.....favorable balance

Since the total debits in the balance sheet must equal the total credits, these changes in the visible item of goods had to be compensated for by variations in the invisible items.—[Edwards, International Trade Finance, p. 23.]

(a) Why were the years 1837, 1850, 1873, turning-point years? (b) What were the invisible items compensating for the shifts in the balance of trade? (c) Was 1914 a turning-point year? was 1918?

338. Balance of Payments in International Affairs of Great Britain

BALANCES OF INCOME AND EXPENDITURE IN THE TRANSACTIONS (OTHER THAN LENDING AND REPAYMENT OF CAPITAL) BETWEEN THE UNITED KINGDOM AND ALL OTHER COUNTRIES

(000,000 omitted)

Particulars	1924	1925	1926
Excess of imports of merchandise and bullion	£ 324	£ 384	£ 477
Estimated excess of government payments made overseas	25	11	.....
Total	349	395	477
Estimated net national shipping income	140	124	120
Estimated net income from overseas investments	220	250	270
Estimated receipts from short interest and commissions	60	60	60
Estimated receipts from other services	15	15	15
Total	435	449	465
Estimated total credit (+) or debit (−) balance on items specified above	+ 86	+ 54	− 12

(a) In what ways is the creditor position of Great Britain indicated by this statement? (b) What is the significance of the growing unfavorable balance of merchandise shipments? (c) What effect did the coal strike have on the balance of trade? (d) New overseas issues on the London market amounted to £134 millions in 1924, to £88 millions in 1925, and to £112 millions in 1926; to these should be added the amounts invested abroad in personal ventures in private businesses. What deductions should be made from these figures to estimate the new British investments abroad?

339. Effect of the War on the Gold Points

Present Gold Point:

100,000 fine ounces of gold at 84s. 11½d.	£424,791	13s.	4d.
Freight at 3s. 9d. per £100 for £424,800	796	10	0
Insurance at 1s. per £100 for £428,000	214	0	0
Interest 5% on £424,792 for 8 days	465	10	5
Boxes and packing	16	0	0
	426,283	13	9
100,000 fine ounces at $20.67183	$2,067,183		
Incidental charges in New York	206		
Net proceeds	$2,066,977		

£1 = $4.8488

Pre-war Gold Point:

100,000 fine ounces of gold at 84s. 11½d.	£424,791	13s.	4d.
Freight at 3s. 9d. per £100 for £424,800	796	10	0
Insurance at 9d. per £100 for £428,000	160	10	0
Interest at 4% on £424,792 for 8 days	372	8	4
Boxes and packing	16	0	0
	£426,137	1	8
100,000 fine ounces at $20.67183	$2,067,183		
Incidental charges in New York	150		
	$2,067,033		

£1 = $4.8506

[*Economic Journal*, March, 1927, p. 134, courtesy Paul Einzig with corrections.]

(a) How is the increase in the gold point explained? (b) This is the gold export point in London on New York: is the gold export point in New York on London also $4.8512? If not, why not? (c) Does the increase in the interest rate from 4% to 5% affect the gold export point in London on New York more or less than it does the gold export point in New York on London? (d) In calculating the insurance charge the insurance is calculated on a bigger sum than is actually shipped: why is this the practice? (e) Interest is calculated

for 8 days, whereas the usual time required for shipment is 7 days: why is this done? (f) Should one use the Bank of England rate or the market rate in this calculation? (g) What effect will the aeroplane have on gold export points between London and the Continent, and between the Continental markets?

340. Exchange Rates

I. Methods of quoting exchange: (a) A quotation of $4.7625 per pound sterling is equivalent to how many pence per dollar? (b) A quotation of 18.25 cents per franc is equivalent to how many francs per dollar? (c) Does a change of quotation from 5.18 francs per dollar to 5.22 francs per dollar represent an increase or a decrease in the exchange rate in New York? (d) Domestic exchange in New York on Chicago on a certain date was quoted at a premium of 30 cents per mille. Calculate the cost of transferring $1,000,000 from New York to Chicago at that rate.

II. Exchange rate quotations in London exchange: (a) Explain the following rates quoted on the London market: (1) the cheque rate, (2) the forward purchase rate, (3) the cable rate, (4) the short sight rate, (5) the check rate with insurance, (6) the rate for foreign money, (7) the rates quoted for long bills, (8) tel quel rates.

341. Conversion of Dollar Bills in New York to a Sterling Balance in London

Suppose an American exporter A receives from Panama a 60 days' sight draft for $20,000 on a New York importer, and he desires to establish as large a balance in sterling at a London bank, B, as possible. His American bank C charges ¼% commission for selling this draft in the market at the discount rate of 6%. With the proceeds he then considers buying a bankers' demand draft at $4.80, or a 90-day sight draft at $4.76. If the forward discount rate in London on 90-day sight bills is 5% and the English stamp charges are 1/20%, which type of bill is the better to buy, and by how much? Explain how arbitrage operations will soon nullify this advantage in the market.

342. Investing London Funds in New York

The discount rate in New York was, let us say, 5% on November 1, and in London it was only 3½%, providing thus a favorable opportunity for loaning British funds in the New York market. The sight rate on bankers' sterling bills in New York was $4.50 and the rate for 90-day bankers' sterling bills was $4.455. On November 1, Horner's bank in London ordered its New York correspondent bank

to draw on it in the New York market bankers' sterling bills to the amount of £250,000.

(a) Assuming that the sight and 90-day rates on London are unchanged from those of November 1, and allowing an acceptance commission of 5/16% and stamp changes of 1/20%, what would be the profit on this loan of £250,000? (b) Show your compilation, and explain all the steps until final payment is made.

343. Rise in Franc Hampers French Export Trade

TEXTILE INDUSTRY ESPECIALLY AFFECTED—MAY INFLUENCE COURSE OF PUBLIC REVENUE

PARIS, Nov. 14.—It is recognized by Paris bankers that the franc has already reached a level which hinders export trade in certain industries, notably textiles. If, under the influence of psychological factors, the rise should be carried further a rather general slump in French trade would be expected. The trade balance would probably be thrown out of equilibrium and fiscal receipts might simultaneously drop. These two phenomena would then, as the bankers see it, affect French exchange unfavorably.

The effect of the rise in the franc is shown in the current index numbers of wholesale prices. While the index number for October worked out at 767, compared with 804 in September, with 785 in August and with 572 in October, 1925, the heavy decline from the September average was occasioned solely by imported products, whose price is immediately affected by exchange rates. The average of national products advanced. It was 744 in October, compared with 743 in September and 722 in August, whereas the index number of imported goods was 808, compared with 912 in September and 902 in August.—[New York *Times*, November 14, 1926.]

(a) Show how the context of this clipping exemplifies the theory of foreign exchange rates, as to: (1) stimulation of exports, (2) movement of price levels, (3) psychological and speculative influences on exchange rates.

344. Cost to Import or Export Gold

Assume that gold in the form of United States coins will yield "par of exchange" when exported to London, or conversely that sterling (gold) will yield "par of exchange" when imported from London; also that it costs 2 cents to export and 3 cents to import gold per pound sterling.

(a) What will it cost the American exporter in dollars to build up a £100,000 credit in London by shipping gold from New York? (b) What will be the actual amount of dollar credit which the American importer will realize at his New York bank if he buys £100,000 gold in London and imports it into the United States? (c) How do

you explain the fact that it costs the American importer more per pound sterling than the exporter?

345. Bills of Exchange

Draw a chart classifying the different types of bills of exchange used in foreign exchange operations or in financing foreign trade, including both commercial and bankers bills.

(a) Arrange the chart to show the different types of bills according to: (1) Drawer—commercial or banker, (2) time—sight or demand, (3) purpose—against sale of goods or advance of funds, (4) security—secured or unsecured. (b) Draw a sight bill of exchange on Horner Bank of London, for £500.

346. Dollar Loans

A New York daily newspaper quoted exchanges in New York on London as follows:

	July 26, 1926	October 26, 1926	January 26, 1927
Demand (sterling)	4.85¾	$4.84⅜	4.84⅝
Cable transfers	4.86¼	4.84¾	4.85¾
Bankers' 60-day	4.81⅞	4.80	4.80½
Bankers' 90-day	4.80	4.78⅛	4.78⅜

Obtain banker's acceptance rates in New York on the three dates respectively, and the London rates on prime bills for the same dates respectively.

A London banker had surplus funds amounting to $100,000 on both July 26 and October 26, 1926. Suppose he requested his New York correspondent on July 26 to draw 90-day drafts on the London office for £20,000 and lend the amount in New York for 90 days against collateral. The New York correspondent carried out instructions. The New York agent was able to purchase bills in New York at the prices quoted above for October 26, 1926.

(a) Compute the net profit or loss realized by the two banks carrying out these transactions. (b) To what rate of interest was this equivalent? (c) Would the English bank have realized a larger income if it had invested its funds in 4% banker's acceptances in the London money market? (d) On October 26, he invested the surplus $100,000 in banker's acceptances yielding 3¾% in London. Would it have been more profitable for the London bankers to have placed these funds in the New York market by means of a dollar loan? Show your calculation.

347. Certain Types of Finance Bills

Kite-Flyers

As against the foregoing, which may be called the more legitimate form of finance bills, we get another variety, dignified by the name of finance bills, it is true, but referred to on the market as "kite-flyers." Kite-flying operations are seen where a firm, not necessarily a financial house, trades on its reputation and induces other people to accept bills, the sale of which is a means of furnishing the drawers with funds. Such bills are accommodation paper, pure and simple, but no one ever realizes that fact until the drawing house signifies its inability to provide the acceptors with the money to meet the bills at maturity.

It is never easy to tell when kite-flying operations are in progress; the bills are often drawn by reputable trading concerns, public companies, and even by foreign banks on banks and finance houses in London, and when a series of renewal bills is drawn the practice may continue unchecked for a long period.

Probably the worst instance of kite-flying in recent years was that which came to light upon the failure of the Bank of Egypt. The investigation undertaken by the liquidator proved conclusively that the bank had been obtaining extensive credits on the London money market simply on its name; it had in fact been living entirely on its credit for a considerable time, and the moment the bank's bills became unsaleable it failed.

House Paper

House paper, so called, comprises all those bills drawn by the foreign branch of a firm on its London house, or vice versa, that is, bills bearing identical names as drawers and drawees. Here we must, as it were, separate the dross from the fine paper: we cannot rightly describe a firm's documentary house paper as finance bills, for, although the exchange dealer does not really get the security of two names to his bills, he still has the documents for the merchandise they represent. The risk comes in where a firm draws these bills clean, that is without documents in any shape or form attached: such finance bills are of doubtful value, and when the paper makes its appearance firms are said to be drawing "pig on pork." There would not be much trouble if the circumstances were known to the market, but as it often happens that the two branches of a firm work under different names, it is sometimes extremely difficult to discern which bills come under this appellation. However, the bankers do scrutinize very carefully any paper which is suspected to be pig on pork, and the discovery that a trader is indulging in this method of finance is the signal for the banker to go carefully with him.

Advances for Crop Requirements

The transactions from which they arise are somewhat involved, but may be roughly divided into two classes. First, there are the bills resulting from "up-country advances." In this case the bankers abroad, having satisfied themselves of the respectability, position, etc., of certain merchants, make them advances in order to enable them to purchase crops up country; with these funds the merchants buy the produce from the

agriculturists, and when the arrangements are completed for export they deliver the bills drawn against the shipments to the banker. In the second case, advances are made direct to the farmers for the purpose of moving the crops, and when the grain, or whatever it be, is ready for shipment, the bills naturally go through the banker who has given the accommodation.—[W. F. Spalding, Foreign Exchange and Foreign Bills, pp. 203-5, Isaac Pitman & Sons, New York, by permission.]

(a) What does Spalding regard as a legitimate finance bill? (b) Wherein do these so-called special forms of finance bills differ from the regular form? (c) Do you agree with the criticisms in these quotations to the use of finance bills in the ways outlined? Give reasons. (d) What justifications can you give for the use of finance bills by commercial bankers?

348. Factors Affecting Foreign Exchange Rates

(a) The rate for sterling demand exchange was quoted in New York on November 14, 1923, at $4.33\frac{5}{8}$. How and why would this rate be affected by: (1) An outbreak of war between Germany and France? (2) The flotation in England of a large loan for the United States Steel Corporation? (3) The flotation of a French loan in the United States? (4) The failure of the American wheat crop? (5) The failure of the American corn crop? (6) A financial panic in London? (7) An increase of rubber imports into this country? (8) The increased output of gold in South Africa? (9) The reduction of the currency notes circulating in England? (10) The exportation of gold from England to the United States? (11) The rise of 30% in the American price level against a 10% rise in England? (b) The gold points in sterling exchange are normally in the vicinity of $4.89 and $4.84; how could the exchange rate ever reach a mark as low as $4.33\frac{5}{8}$?

349. Sterling Exchange

The following quotation was taken from the New York *Evening Sun,* November 1, 1926:

STERLING, AT NEW LOW, FEATURE OF MARKET

The depression in sterling carried the pound to $4.84\frac{5}{8}$ for the first time in many months and was due to seasonal pressure of commodity bills. Sterling is now within $\frac{1}{4}$ cent of the gold point, which local dealers figure at $4.84\frac{3}{8}$ for cables. The opinion was voiced today that sterling would either reach the gold point and occasion shipments of the metal to New York or that the Bank of England would raise its discount rate to prevent such a gold exodus.

GREAT BRITAIN

Parity	Today	Saturday	Week ago
$4.8665 Sterling			
Demand	$4.84 5/16	$4.84 3/8	$4.84 3/8
Cables	4.84 11/16	4.84 3/4	4.84 3/4
Bankers, 60 ds	4.79 7/8	4.80	4.80
Bankers, 90 ds	4.78	4.78 1/8	4.78 1/8

(a) Explain why there should be a "seasonal pressure of commodity bills" on November 1. (b) What would determine the gold points in this case? (c) Would an increase in the discount rate in England change the gold points? (d) Explain fully and carefully just how an increase in the discount rate in England would influence the quotations on sterling bills in New York City. (e) The federal reserve authorities were loath to raise the discount rate during the autumn of 1926: what international considerations occasioned this policy? (f) If the central banks of England, France, Germany and the United States should cooperate to prevent the international shipment of gold, how would they proceed to make this policy effective?

350. Relation Between the London-New York Rate of Exchange and Money Rates in the Two Markets

I. Annual averages of rates, 1882-1913:

The correlation coefficients are as follows:

Between the London-New York rate of exchange and the rate of interest on floating money in London	—.42
Rate of discount on 3 months' bank bills in London	—.42
Rate of interest on call money in New York	—.17
Rate of discount on indorsed bills in New York	—.37
Between the 3 months' rate of discount in London and rate of discount in New York	.45

(a) The coefficients of correlation between exchange rates and interest rates are all negative: what does this mean? Similar coefficients, with Paris substituted for New York were .01, —.01, (——), .18, and .82. Interpret the disparity of signs and sizes of coefficients. (b) Why should the London and Paris discount rates show a higher correlation than the London and New York rates? (c) If the discount rates between New York and London markets show a high degree of correlation would you expect the exchange rate and discount rate correlation coefficient to be negative? high?

II. Monthly averages, 1882-1913:

		Jan.	Feb.	Mch.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
London floating rate...	%	2.35	2.44	2.66	2.16	1.86	1.59	1.30	1.49	1.59	2.12	2.64	2.80
London 3 months' discount rate.....	%	3.17	2.82	2.74	2.34	2.42	2.13	1.83	2.27	2.54	2.97	3.53	3.44
London-New York Exchange rate $4 omitted..		86.4	87.4	87.6	87.6	87.9	87.9	87.3	87.2	86.5	86.0	86.2	86.3
New York call money..	%	4.63	2.24	2.48	3.39	2.72	2.12	2.80	1.86	2.68	3.40	3.44	3.51
New York discount rate 1885–1901.....	%	5.32	4.88	4.60	4.87	4.93	4.55	4.08	4.50	5.07	5.46	5.17	5.25

(a) Plot these data. Note concurrent movements—directions, range.

III. Correlation coefficients between the London-New York rate of exchange and:

	Floating Rate in London	3 Months, Discount Rate in London	6 Months, Discount Rate in London	Call Money Rate in New York	Discount Rate in New York
January.....	−.52	−.40	−.39	−.13	−.37
February.....	−.19	−.17	−.15	−.02	−.17
March.....	−.21	−.28	−.16	−.27	−.21
April.....	−.20	−.37	−.31	−.34	−.04
May.....	−.39	−.44	−.44	−.05	−.03
June.....	−.13	−.14	−.14	−.25	−.05
July.....	−.06	−.07	−.15	−.36	−.55
August.....	+.16	+.04	−.15	−.10	−.32
September.....	+.20	+.08	+.00	−.27	−.19
October.....	+.17	+.13	+.01	−.08	−.26
November.....	−.06	−.14	−.24	−.03	−.35
December.....	−.10	−.19	−.31	−.08	−.32
Average.....	.20	.20	.20	.17	.24

[E. G. Peake, Study of Some Money Market Statistics, 1926, rev. ed., pp 29-33, by permission.]

(a) Generally speaking the correlations are negative: what does this mean? Would this be expected from the New York point of view? the London point of view? (b) The common orthodox view of the relation of discount rates and exchange rates receives confirmation in the New York-London exchange rates from London point of view, and in the London-Paris exchange rates from the Paris point of view: is there any explanation of this difference? (c) In the case of both London and New York, the rates for short money appear to be less closely connected with the exchange rate than are

the discount rates: is there reason for this? (d) Why should the London rates for August, September, and October be positively correlated with the exchange rate, thus disagreeing with the rest of the year and with the annual average correlation?

351. Relation of Interest Rates to the London-Paris Exchange Rate

I. We have now to examine the London-Paris exchange, its relationship with the rates of interest on floating money, and of discount in London and with the market rate of discount in Paris.

The table sets out the average (annual) rate of exchange, the average rate of discount on 3 months' bank bills in London, and the average market rate of discount in Paris, each being the average of the rates stated in the first number of the *Economist* at the beginning of each month (1882 to 1913).

It is seen that the rates of discount move up and down roughly together, while the rate of exchange shows very little relationship to the other rates.

The correlation coefficients are as follows:

Between London-Paris rate of exchange and London 3 months' discount rate	—.01
Between London-Paris rate of exchange and Paris market rate	+.18
Between London 3 months' discount rate and Paris market rate	+.82

0.5% of a rise or fall in the London 3 months' rate of discount corresponds to a rise or fall of almost exactly 0.25% in the Paris market rate of discount.

The correlation between

(1) the average annual French exchange and the average annual differences between the rate of interest on floating money and the rate of discount on 6 months' bank bills in London is	—.19
(2) the average annual French exchange and the rate of interest on floating money in London is	+.01
(3) the average annual French exchange and the bank rate of discount on 6 months' bank bills is	+.02

(a) Why should the discount rates of London and Paris markets have such high degree of correlation? (b) Is the lack of connection between the exchange and the rates of interest and discount expected according to the orthodox theory of foreign exchange? (c) Offer explanations of the low correlation coefficients other than the one between the discount rates of London and Paris. (d) Is the correlation of rates and exchange of the two markets likely to be higher or lower since the war than in the period studied by Peake?

II. Monthly averages, 1882-1913:

		Jan.	Feb.	Mch.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
London floating money rate	%	2.35	2.44	2.66	2.16	1.86	1.59	1.30	1.49	1.59	2.12	2.64	2.80
London 3 months' discount rate		3.17	2.82	2.74	2.34	2.42	2.13	1.83	2.27	2.54	2.97	3.53	3.44
London-Paris exchange francs 25 omitted		21.1	20.9	24.0	22.0	20.6	21.3	19.6	21.5	23.9	23.8	21.6	23.0
Paris market rate	%	2.94	2.75	2.38	2.51	2.44	2.19	2.35	2.24	2.06	2.44	2.82	2.70
Difference between London floating rate and 3 months' discount rate	%	.82	.38	.08	.18	.56	.54	.53	.78	.95	.85	.89	.66

(a) Plot these data, and observe the following points: (1) The Paris discount rate moves roughly in the same direction throughout the year as the London floating and discount rates. Is it more constant than the London rate? Account for this. (2) Point out the seasonal differences in the direction and timing of the movements of the two rates. (3) Is the exchange rate more or less irregular than the money rates? when does it have maxima and minima? do they agree with the money rate maxima and minima of either Paris or London?

III. Correlation coefficients between the London-Paris exchange rate and—

	Floating Rate in London	3 Months' Discount Rate in London	6 Months' Discount Rate in London	Market Rate of Discount in Paris
January	+.18	+.08	+.08	+.06
February	+.21	+.12	+.10	+.03
March	+.23	+.19	+.16	+.09
April	+.19	+.14	+.13	+.13
May	−.02	+.13	+.17	−.08
June	+.32	+.26	+.21	−.11
July	+.01	+.02	+.06	+.10
August	+.29	+.37	+.30	+.14
September	+.18	+.19	+.14	+.15
October	+.44	+.35	+.26	+.30
November	+.34	+.29	+.25	+.20
December	+.40	+.40	+.37	+.31
Average	.23	.21	.19	.14

[E. G. Peake, Study of Some Money Market Statistics, 1926, pp. 20-23, by permission.]

(a) Almost all the coefficients are positive: what does this mean? (b) All the coefficients are small: what does this indicate? (c) Does the positive character of the cofficients confirm the orthodox theory of the relation between exchange rates and interest rates (1) from the Paris point of view, (2) from the London point of view?

352. The Trend of Sterling Exchange in New York since 1913

(a) Prepare a table for the average monthly exchange rate sterling since 1913. (b) In another table indicate the index numbers of prices during the same period for England and the United States. (c) From the tables thus compiled make a graph showing the fluctuations in the rate of exchange and in prices. (d) How do you account for the stability during the greater part of the war? Why did the rate start to decline in the first part of 1919?

353. Profit on Exchange Operations

An American bank buys the following bills, remits them to London for discount and for credit to its account:

1. A demand bill for £1,000 at $4.755.
2. A 60 days' sight bill for £1,000 at $4.73.
3. A 90 days' sight bill for £10,000 at $4.715.

It then sold drafts as follows:

1. A demand draft for £800 at $4.80.
2. A 30 days' sight draft for £2,000 at $4.75.
3. A 60 days' draft to cover the remaining balance in account at $4.74.

(a) Calculate the profit from the operations, assuming the following data: The London bank's commission for acceptance of the 30-day and 60-day drafts, ¼%. English stamp charges: on demand bills 2d. per stamp, regardless of the amount; on 30, 60, or 90-day bills 1/20%. Neglect interest paid by English bank on the balance.

354. Making Remittances Abroad

A has purchased books from the London Book Store, London, amounting to £100. Assume that A lives in a small town in Indiana which has only one bank and which carries neither an account abroad nor one with a New York bank. The rate in New York on London is quoted at $4.80.

(a) In what different ways may A make payment? (b) If A decides to use a bank, explain how he can secure a draft payable in London. (c) About what rate must he pay to secure the draft? (d) How would he forward the draft to the London Book Store?

(e) Explain the method by which small interior banks can provide foreign exchange bills for their customers who are buying goods abroad.

355. New Conversion Rates for International Money Orders

Office of the Post Master General, Washington, D. C., July 27, 1920.
Order No. 4494.

Because of the decided and long-continued depreciation of the currency of certain European countries as compared with the United States dollar, it is hereby ordered that on and after August 15th, and until further notice, postmasters in issuing international money orders shall convert the money of the United States in accordance with the following schedule:

Great Britain	£1	=	$4.00
Netherlands	1 florin	=	38 cents
Sweden	1 krona	=	24 cents
Denmark	1 krona	=	20 cents
Norway	1 krona	=	20 cents
France	$1	=	10.30 francs
Belgium	$1	=	10.30 francs
Italy	$1	=	10.30 francs

A. S. Burleson, Postmaster General

(a) If the government had not changed the conversion rates, outline a method of speculation in foreign exchange, through the post office and banks, that would obtain. (b) What was Ponzi's alleged method of operating "international postal money orders? (d) Procure U. S. Government provide exchange balances in foreign countries against which it sells international postal money orders? (d) Procure the market exchange rates of August 15th and after and determine whether the new conversion rates were above the market. If below the market, what would happen? If above the market, what would happen?

356. Two-Point Arbitrage

A London banker received notice from his Paris correspondent that the rate in Paris on London was 25.25. The London rate on Paris at the same time was 25.305.

The London banker requested his correspondent in Paris to sell £10,000 in cables on London. He sold francs on Paris to the amount of 252,500 francs.

Another Paris banker being informed that the London rate on Paris was 25.305, requested his London correspondent to buy in London 50,000 francs on Paris. The Paris bank simultaneously bought 1,975.9 pounds on London.

(a) Disregarding all commission and cable charges, compute the profit or loss in these two transactions.

357. Arbitrage Transaction

Suppose that on a certain date the cable rate in New York on London is $4.90; the rate in Paris on London is 25.5; and the rate in New York on Paris 5.18 francs to the dollar. Smith of New York decides to take advantage of the differences in these quotations and employs $100,000.

(a) Draw a diagram showing the order in which the arbitrage transactions take place between the different countries. (b) What are the net profits in this case? Show your actual calculation. (c) What is the difference between simple and compound arbitrage? (d) Are all arbitrage transactions carried on by telegraphic transfers? State reasons for your answer.

358. Finance Bill

A banker in London finds that the interest rate in New York is 4½% and only 4% in London. This banker decides to invest funds in New York amounting to $150,000. In accordance with that policy the New York correspondent is requested to draw 60-day sight bills on the London bank. Bills are drawn and sold at $4.72. The American correspondent buys demand drafts 10 days before maturity and forwards them to London, adding ⅛% commission. The demand draft cost the New York correspondent $4.75.

(a) Draw drafts which would be suitable for both transactions. (b) What is the net profit or loss of the New York correspondent?

359. Three-Point Arbitrage

A New York bank received a cable from Paris stating that the rate for sterling cables was 25.22. The rate between New York and London was $4.89 and between New York and Paris 19.25.

(a) On the basis of the above rates for cable transfers, compute the profit, if any that a New York banker can make (disregard brokerage commissions, cable charges, etc., for time being) through the use of $25,000 in arbitrage. (b) Draw a diagram showing the course the funds would take.

360. Transferring Funds Abroad

The X. Y. Z. Wholesale House, South Bend, Indiana, purchased goods from the A. B. C. of London amounting to £15,000. The X. Y. Z. Wholesale House agreed to pay for the goods in London funds on date of shipment. Banks in South Bend were neither carrying foreign balances nor maintaining foreign correspondent bank relationships at the time.

(a) State the different ways in which the X. Y. Z. Wholesale House can place these funds in London, as per agreement. (b) If they decide to provide a sight draft payable at the Horner Bank, London, on July 15, the date shipment is to be made, explain how such a draft may be secured. (c) On what date approximately must this draft be purchased? (d) If the rate of sterling sight bills on London is $4.84 on the date the draft is purchased, what will be the cost to the X. Y. Z. Wholesale House?

361. Banker's Long Bills

Suppose that a 90-day sight bill for £1,500 be drawn by a National Bank in New York on the Lloyds Bank of London. The discount rate is 4½%, the stamp tax 1/20%, and the sight rate is quoted at $4.50.

(a) What is meant by a no-profit buying price? (b) Calculate the no-profit price in this problem. (c) What amount of credit will the National Bank receive at the Midland Bank in London? (d) Under similar conditions, how much in pounds sterling can a buyer secure by expending $100,000 in the New York market?

362. Trading in Foreign Exchange

(a) The par of exchange between London and Italy is 25.22½. On January 25, 1924 the rate quoted in London was $4.22⅝ on New York and 97¼ lire on Italy. What should the rate on Italy have been in New York so as to make arbitrage transactions unprofitable?

(b) The par of exchange between London and Amsterdam is 12.107 florin. The quotation in London on Amsterdam on January 25, 1924 was 11.39¼ florin and on New York $4.22⅝. The par of exchange in New York on Amsterdam is 40.2 cents per florin. The rate quoted in New York on Amsterdam on January 25, 1924 was 37.2. Would a New York bank have made a profit or sustained a loss by arbitrage transactions to the amount of $100,000? If so, how great a gain or loss?

363. The Use of Forward Exchange Contracts to Avoid Risks Incident to a Fluctuating Exchange

Suppose a wool exporter in South Africa has sold wool in London for £10,000, and knows that 60 days hence he will have £10,000 demand exchange for sale. Also suppose a South African importer buys machinery in London for £10,000, payable in London 60 days hence.

(a) Explain how the risks of exchange fluctuation can be shifted

to the South African banker by use of forward exchange contracts. (b) Show also that for the South African bank the deal covering the importation is a hedge against the deal covering the exportations. (c) The banker's profits are limited to interest, commission, and the margin between his buying and selling rates: explain.

364. Rates of Exchange for Commercial Long Bills—Bankers' Acceptances

By buying 90-day commercial bills drawn on the Midland Bank of London, the X National Bank of New York desires to transfer £6,000 for credit to its balance at the Barclays Bank, Limited, London. Assume that on a certain date the sight rate is $4.75, the discount rate 3%, the commission charge 1/32%, and the stamp tax 1/20%.

(a) Determine the rate to be paid for this commercial bill. (b) How much will it cost the X National Bank in dollars to secure this 90-day draft for £6,000? (c) Why on this type of bill is a commission charge added to the cost, and not on bankers' long bills?

365. Selling Foreign Exchange in New York

A New York importer in need of immediate funds in New York, offered the following bills at his New York bank for discount:

1. A bankers' demand draft for £1,000.
2. A commercial 60-day bill for £1,500, payable in London.
3. A bankers' demand draft for 7,000 francs.
4. A bankers' demand draft for 1,400 lire.

(a) From the most recent quotations available, determine the amount which the importer would receive in the form of a deposit at his bank.

366. Futures in Foreign Exchange

The following are given as reasons for the difference between the spot and the future rate of exchange:

(1) The difference in the rates of interest that can be obtained on deposits in the place where they are paid for and the place where they are held.
(2) The number of buyers as against sellers and the possibility of "marrying" transactions.
(3) The risk that a bank runs in keeping large balances abroad.
(4) The possibility of arbitraging the rate for futures with the foreign country.
(5) Arbitrary determination of futures price through associated control by colonial and foreign banks.—[Minty, English Bank-

ing Methods, p. 387, Isaac Pitman & Sons, New York City, by permission.]

(a) Explain how each effects the difference.

367. Factors Affecting the Foreign Exchanges

LONDON, Oct. 24.—Last week's unusual activity in the foreign exchange market was partly seasonal, but largely, also, due to special circumstances. Generally speaking, the "unstabilized exchanges" moved in a rather bewildering fashion. What impressed the market, and considerably assisted in the recovery of the franc, was the statement by the French Government to the effect that the Morgan credit has been entirely reconstituted. It had been inferred that this had been effected out of the Government's own resources; but what really appears to have happened is that the Bank of France, by issuing more notes which are not included in the circulation figures, has been able to purchase foreign currency to the original amount of the Morgan credit.

The strength of Italian exchange was due to considerable Continental purchasing of lire, evidently for adjusting commercial debts. Norwegian currency appreciated very rapidly to within about 1½ kroner of parity, owing to the decision of the Bank of Norway to reduce its buying rate for sterling to 20 kroner. Japan's decision to ship gold to America for purposes of strengthening the specie reserve explains the rise in the Japanese yen to within 7-16d of parity, while the firmness of Belgian francs presaged an early stabilization loan, which, incidentally, is having a sentimental effect upon French exchange.

German exchange continued to hover around the gold point, with the result that practically all of the £900,000 offered in the open market last week went to Germany. The drop in the dollar sterling rate brought Swiss and Dutch exchanges down, but although Switzerland took a little gold from the Bank of England neither of these exchanges is yet down to the gold point.—[New York *Times*, October 24, 1926.]

(a) Take up, sentence by sentence, the accompanying paragraphs from the financial page of a daily paper, and explain why each of the factors caused the result named.

(b) Explain such expressions as "unstabilized exchanges," the "Morgan credit," "Issuing notes not included in the financial statement," "Continental purchasing of lire," "to reduce its buying rate for sterling to 20 kroner," "stabilization loan."

368. Use of Options in Speculation in Foreign Exchange

In purchasing an option or call, you buy a contract which guarantees delivery to you marks, francs, or lire at any time within six months at a price slightly above the present market value. For this contract you pay a premium as follows:

(Cost of option is credited toward purchase price of marks, if taken up)

$2,500	controls	1,000,000	marks,	francs,	lire,	for	six	months
1,300	"	500,000	"	"	"	"	"	"
700	"	250,000	"	"	"	"	"	"

$300	controls	100,000	marks,	francs,	lire,	for	six	months
150	"	45,000	"	"	"	"	"	"
75	"	20,000	"	"	"	"	"	"
40	"	10,000	"	"	"	"	"	"

[Based on circular of Geo. H. Perkins & Co., N. Y., 1922.]

(a) If the current rate of exchange is 1½ cents per mark and Perkins sold the option at 1 cent from the market, the option would become profitable shortly after the exchange rate went above 2½ cents. Calculate the profit point exactly. (b) If the speculator bought an option on 100,000 marks for $300, callable at 2½ cents, calculate his profit if the exchange rate rose to 4¼ cents per mark. (c) Under what conditions would the speculator not make use of his option?

369. Dollar Loan

On May 1 the discount rate for 60-day bankers' acceptances in New York City on London was 4%, while the interest rate in New York City was quoted at 5¾. The New York agent of the Horner Bank of London had an opportunity to lend about $100,000 in New York at 5¾%. The exchange rate in New York on London was $4.86 for sight sterling and $4.825 for 60-day bankers' bills.

(a) What is the net profit or loss on this transaction for the London banker, assuming no commission for the New York agent? (b) In case of a gain is it properly called a "profit"? Why? (c) Assuming that these funds can be loaned in London at 4% and in New York at 5¾%, how much greater is the net profit or net loss obtained by lending the funds in New York rather than in London? (d) In view of the fact that sight bills must be purchased in New York and forwarded to London to arrive not later than date of maturity of acceptances, for how many days can the New York agent lend out these funds? What is the sailing time for sight bills from New York to London? (e) Does the lender or borrower assume the risk in a dollar loan? Why is this called a dollar loan? (f) Are such transactions a speculation on the exchanges?

370. Sterling Loan

The interest rate in New York was quoted at 6% August 1 and in London 4%. The X National Bank of New York entered into an agreement with the Glass Manufacturing Company to secure £100,000 bankers' 90-day drafts on the Horner Bank of London. The Horner Bank had notified its agent in New York that it would accept 90-day drafts drawn on it, charging ⅜% commission. The

New York agent of the London bank therefore drew 90-day drafts against Horner Bank amounting to £100,000 and loaned them to the X National Bank, receiving collateral supplied by the Glass Manufacturing Company. The rate of exchange in New York on London on August 1 was $4.84 for 90-day bankers' bills and $4.86 on sight drafts.

(a) Trace these drafts up to the time they mature and are paid off. (b) What was the amount of commission paid by the New York borrower? Who received this commission? (c) If the sight rate at maturity was 4.865, show the net loss or net profit for the New York bank. (d) When would cover have to be bought in New York to provide funds in London to pay off these drafts?

371. Preference for Dollar or Sterling Loans

When the English banker, proposing to accept one of these loan bills drawn by his own agent, shows his preference as between the dollar loan and sterling loan, we can infer his opinion with respect to the probable future course of sight sterling in New York. A preference for the dollar loan is a clear indication that he anticipates low sight sterling at end of period. . . . A reluctance to make dollar loans, or what is the same thing, a preference for sterling loans, shows naturally a belief in the contrary future for sight sterling in New York.—[Whitaker, Foreign Exchange, pp. 371-2, D. Appleton & Co., New York, by permission.]

(a) Explain conditions when "low sight sterling" would be preferable to the English banker; "low sight dollar." (b) Can the banker's attitude be taken as a safe guide regarding the course of exchange during the next 90-day period? Why? (c) Would the interest of the New York and London banker be the same?

372. Conversion of Dollars into Foreign Currencies

(a) Find the cost of 7,540 lire in dollars in New York at par of exchange minus 1/16 of 1%. (b) If the Belgian franc was quoted at 4.13 on February 11, 1924, how much did it cost in dollars in the United States to buy 8,450 francs? (c) The Dutch florin was quoted on February 11, 1924 at 37.37. Find the cost in dollars to secure a bankers' demand bill in New York for 15,000 florin. What would it have cost if the florin were quoted at par of exchange between New York and Amsterdam? (d) The par of exchange for the Spanish peseta is 19.3 cents. On February 11, 1924 the rate quoted in New York was 12.73. How many pesetas could have been obtained for $25,675.00? What was the per cent of depreciation of the Spanish peseta on that date? (e) On February 11, 1924, the rate on demand sterling was quoted in New York at $4.30. What would a demand draft for £1,000 have cost in New York on that date?

373. Correspondent Accounts Abroad

The X National Bank of New York decided to open correspondent relations and build up a deposit balance of £25,000 with the Midland Bank in London. The X National Bank buys the following bills and forwards them to the Midland Bank for credit to its account:

1. A demand bill for £3,000, drawn by a cotton exporter.
2. A demand bill for £2,500, drawn by a wheat exporter.
3. A 60-day commercial bill for £10,000, drawn by a steel company.
4. A 90-day commercial draft for £12,000, drawn by a cigar manufacturer.

(a) Using the most recent daily quotations available, determine just how many dollars it will cost the X National Bank of New York to purchase these bills. (b) What would be the amount of the London balance, after the X National Bank sold the following drafts on the Midland Bank: (1) a 60-day draft for £1,200; (2) a 90-day draft for £500?

374. Investing New York Funds in Paris

Suppose that on November 1, funds can be loaned out in the Paris market for 6%, and that at the same time inactive funds can be obtained in the New York market for 5%. The exchange rate for 60-day dollar bankers' bills in Paris on November 1 is assumed to be 6.35 cents per French franc, and at the same time the sight rate is 6.42 cents per French franc.

(a) Show step by step how the National Bank of New York with $100,000 idle funds for investment in foreign exchange would proceed to make a loan of this amount in the Paris money market, through the use of a 60-day dollar draft drawn on it by its Paris correspondent bank. (b) Calculate the profit derived from the loan if paid in New York at maturity, with no change in the rates of French exchange since November 1, after deducting the acceptance commission of ¼ of 1%, and stamp charges of 1/20 of 1%.

375. Relation of Money Rates of Different Markets

Between 1882 and 1913 a rise or fall of 1% in the London 3 months' rate of discount was accompanied on the average by a rise or fall, respectively, of almost exactly ½% in the Paris rate of discount; and a rise or fall of 1% in the New York discount rate was accompanied on the average by a rise or fall, respectively, of .7% in the floating rate and the 3 months' discount rate in London.—[E. G. Peake, Study of Some Money Market Statistics, by permission.]

(a) Give reasons why Paris rates fluctuate less than London rates. (b) Give reasons why London rates fluctuate less than New York rates. (c) Is there any reason why the correlation of these rate movements should be higher in some months [e.g., November, December, January] and lower in others [e.g., October, April]?

376. Relation of Discount Rates and Exchange Rates

The correlation coefficient between the London-Paris rate of exchange and the London 3 months' discount rate, for the years 1882 to 1913, was found by Peake to be —.01 and the coefficient between the London-Paris rate and the Paris market interest rate was found to be +.18, whereas the coefficient between the London 3 months' discount rate and the Paris market rate was +.82.—[E. G. Peake, Study of Some Money Market Statistics, p. 20, by permission.]

(a) Are these correlation coefficients between the exchange rates and the discount [interest] rates in harmony with the orthodox theory of the exchanges?

377. Calculation of the Gold Value of the Total Note Circulation in Great Britain as of June, 1912-24

Year	Note Circulation (000)	Average Exchange Rates (Cables in N. Y.)	Gold Value of Circulation on Basis of Exchange Rates (000)	Purchasing Power Parities of Pound	Gold Value of Circulation on Basis of Purchasing Power Parities (000)
	£	$	$	$	$
1912	29,209	4.8760	142,423	4.8178	140,723
1913	28,653	4.8723	139,606	4.8665	139,440
1914	28,703	4.8844	140,197	4.9692	142,631
1915	81,213	4.7739	387,703	3.8543	313,019
1916	157,998	4.7575	751,675	3.8869	614,122
1917	201,074	4.7543	955,966	4.1682	838,117
1918	306,586	4.7534	1,457,326	4.1127	1,260,896
1919	420,612	4.6211	1,943,690	4.2037	1,768,127
1920	464,014	3.9498	1,832,762	3.9419	1,829,097
1921	433,440	3.7815	1,639,053	3.7764	1,636,843
1922	398,772	4.4519	1,775,293	4.5911	1,830,802
1923	389,156	4.6147	1,795,838	4.9638	1,931,693
1924	394,375	4.3199	1,703,661	4.4105	1,739,391

(a) Explain each calculation, and show the purpose of it. (b) Why between 1912 and the summer of 1914 was the value of the circulation calculated by exchange rates and by purchasing power parities the same? (c) Why between 1914 and 1919 did the value

of the circulation calculated by exchange rates exceed the value calculated by purchasing power parities, but the reverse prevails between 1921 and 1924? (d) The gold value of the note circulation is much greater now than before the war; why? (e) The gold value of the note circulation has not fluctuated greatly since the war; why? (f) How is the slight tendency of the value of the note circulation to increase in recent years explained? (g) Suppose England is on a paper basis and United States on a gold basis, the exchange rate in New York on London being $3.60. Cannot the gold value of the English currency be found by multiplying the number of English paper sovereigns by 3.60/4.8665? Consider the following objections: (1) the rapid fluctuations of exchange rates; the variety of influences to which exchange rates are subject; the probability that exchange rates do not represent fundamental conditions; (2) the fact that exchange rates usually anticipate depreciation or appreciation.

378. Exchange Between a Gold Country and a Silver Country

Chinese exchanges continued to soar to record levels on this movement yesterday as the "shorts" were covering for the settlements due on Feb. 25. Advances ranging from ¼ to 1¼ cents were registered in the Hongkong, Shanghai and Peking remittances. Higher prices for the white metal naturally followed, the London article selling up to 28d and the New York commodity to 60 cents, unequaled since last Fall. India has been the chief buyer, and on this account London was today shipping a consignment of the metal.—[New York *Times,* February 3, 1927.]

(a) Explain the operations when "shorts cover." (b) Why should a rise in the price of silver in London cause the shorts on Shanghai to cover, and what effect would such covering have on the price of silver and on Shanghai exchange?

379. Abandonment of the Gold Standard

Suppose the other countries of the world were to abandon the gold standard and stay on a paper standard, the United States alone remaining on the gold standard: (a) The present value of gold would fall, the price level in the United States would rise. Give the reasoning. (b) Foreign exchange rates would be unstable. Give the reasoning. (c) The price level in the United States would be unstable, due to reduced demand for gold and the less ability of the gold currency system to absorb changes of value in the metal. Explain. (d) The United States as a holder of much gold would lose heavily. Why? (e) The gold debt of European countries to the United States would be much reduced. Why?

380. Conversion of Prices from Paper to Prices on Gold Basis

Using average monthly wholesale prices of 1913 as base, the following percentage index represents the prices of England on June 30:

Year	On Paper Currency Basis	Converted to Gold Basis	Average Monthly Exchange Rates N. Y. on London
1913	99	...	$4.872
1914	95	...	4.884
1915	125	123	4.774
1916	154	151	4.758
1917	216	211	4.754
1918	226	221	4.753
1919	235	223	4.621
1920	300	243	3.950
1921	183	142	3.782
1922	159	145	4.452
1923	150	142	4.615
1924	160	142	4.320

For the years of inconvertibility (1915-24) the index numbers have been converted to a gold basis by applying to them the percentage which the corresponding average monthly exchange rates for dollars are of par.

(a) Show by numerical example how this calculation is made. (b) This calculation assumes that the price level in England rose in proportion to the decline in exchange in New York on London: is this a tenable assumption? Suppose the former rose more slowly than the latter fell, how would it affect the converted prices?

381. Purchasing Power Parities

As between two currencies the purchasing power of the foreign currency in its own country and the purchasing power of the domestic currency in its country, by influencing the demand and the supply of bills of exchange, are the main factors in determining the ratio at which the two currencies exchange, whether the countries are on a specie or paper basis, or one on a paper basis and the other on a gold basis.

The ratio between the purchasing power of two gold units is kept in harmony with exchange rates by movements of commodities and of gold.

Purchasing power parity is the ratio between the internal purchasing powers of two currency units.

The prices of goods peculiar to one country and not exported, for example, labor services and perishable goods, may be permanently at variance in terms of gold in different countries.

(a) Comment on the validity of the above statements.

382. Calculation of Purchasing Power Parities

Prices in June according to Statist index number of prices for Great Britain and the Bureau of Labor Statistics index number for the United States were as follows:

Year	United States Index	British Index	Purchasing Power Parities	Average Exchange Rates (Cables in New York)	Percentage Purchasing Power Parities Are of Exchange Rates
1917	185	216	$4.1682	$4.7543	87.67
1918	191	226	4.1127	4.7534	86.52
1919	203	235	4.2037	4.6211	90.97
1920	243	300	3.9419	3.9498	99.80
1921	142	183	3.7764	3.7815	99.87
1922	150	159	4.5911	4.4519	103.13
1923	153	150	4.9638	4.6147	107.56
1924	145	160	4.4105	4.3199	102.10

(a) The formula for calculating the purchasing power parities is the United States index ÷ the British index × par. Explain why. (b) When the ratio of the purchasing power parity to the exchange rate is below 100%, are imports into the United States stimulated or discouraged? Why? (c) If the price level in the United States rises faster than the price level in England, how does it affect the purchasing power parity? (d) Why does the percentage which the purchasing power parity is of the exchange rates, whether above or below, tend to return to 100%? (e) The Federal Reserve Board index number for the United States in June is as follows: 1919, 207; 1920, 262; 1921, 143; 1922, 161; 1923, 164; 1924, 154. Substitute these figures for the Bureau of Labor Statistics figures and note the effect on the purchasing power parities. Which index is the more comparable with the British index? Which should be used in calculating the purchasing power parities?

(f) The index numbers of prices of imported and exported goods were on June 30:

	U. S. Index	British Index
1919	201	237
1920	246	388
1921	114	170
1922	144	156
1923	165	176
1924	154	175

Substitute these figures and calculate the purchasing power parities. Compare with figures found in above calculations. What reason can be advanced for the use of these indexes in the calculation of purchasing power parities?

383. International Price Movement

I. Comparison of Wholesale Prices: (a) Plot the movement of wholesale prices in the leading countries of the world since 1913, using the indexes prepared by the League of Nations. (b) Compare their movements (1) during the war, and (2) from 1919 to 1924, and (3) 1924 to date, and account for the diverse movements noted. (c) Pick out the instances when exports of merchandise to the United States were facilitated between two countries by diverse price level changes. (d) In its influence upon foreign trade does it make any difference whether the price level rises faster in a foreign country than in the United States, or falls faster in the United States than it does in the foreign country? Illustrate in the series.

II. Comparisons of Movements of Retail and Wholesale Prices: (a) Plot on semi-log paper the movements of retail and wholesale prices in various countries. (b) In general, which series—retail or wholesale—move up first, down first? higher, lower? Give reasons. (c) Which series is the more important barometer for the manufacturer? the laborer?

[Based on Tables X and XI, Mo. Bul. of Stat. of League of Nations.]

384. Transfer of Funds

Assume that the Midland Bank in London found it necessary to transfer £10,000 from London to Amsterdam. The telegraphic transfers in London on Amsterdam are quoted at 1217.7 florin per £100 sterling. In Amsterdam the telegraphic transfers on London are quoted at £8.265 per 100 florin. The time required to make the transfer of the funds is the same, regardless of the market in which it is made.

(a) Should the bank buy a telegraphic transfer in London on Amsterdam, or should it direct its correspondent in Amsterdam to sell exchange for florins drawn on the London office? (b) If there is any gain in one method over the other, state the amount and how obtained. (c) In what three ways may funds be transferred from one country to another?

385. Restoring a Bank Balance Abroad

On June 28, 1926, the closing rate of sterling exchange in New York on London was, according to the New York *Times,* $4.86⅜ for demand bills and $4.86 13/16 for cable transfers. The X National Bank found on that date its balance at the Horner Bank in London was being rapidly depleted. On further examination it was decided that the present balance abroad would be sufficient for another 10 days.

(a) Determine which of these two classes of exchange would be least expensive to the New York bank. (b) Show the actual difference in the cost in the two methods of remitting funds. (c) Should interest be included in either or both classes? (d) Account for the difference in the two quotations. (e) Show how the problem would have been complicated had the New York banker purchased 90-day bankers' bills and forwarded them to London.

386. Dollar Exchange

Section 13 of the Federal Reserve Act also provides that any member bank may accept drafts or bills of exchange drawn upon it having not more than three months' sight to run, exclusive of days of grace, drawn, under regulations to be prescribed by the Federal Reserve Board, by banks or bankers in foreign countries or dependencies or insular possessions of the United States for the purpose of furnishing dollar exchange as required by the usages of trade in the respective countries, dependencies, or insular possessions.

No member bank shall accept such drafts or bills of exchange for any one bank to an amount exceeding in the aggregate 10 per cent of the paid-up and unimpaired capital and surplus of the accepting bank unless the draft or bill of exchange is accompanied by documents conveying or securing title or by some other adequate security. No member bank shall accept such drafts or bills in an amount exceeding at any time in the aggregate one-half of its paid-up and unimpaired capital and surplus. This 50 per cent limit is separate and distinct from and not included in the limits placed upon the acceptance of drafts and bills of exchange as described under Article A of this regulation.

Section IV. Regulations

Any member bank desiring to accept drafts drawn by banks or bankers in foreign countries or dependencies or insular possessions of the United States for the purpose of furnishing dollar exchange shall first make an application to the Federal Reserve Board setting forth the usages of trade in the respective countries, dependencies, or insular possessions in which such banks or bankers are located.

If the Federal Reserve Board should determine that the usages of trade in such countries, dependencies, or possessions require the granting of the acceptance facilities applied for, it will notify the applying bank of its approval and will also publish in the Federal Reserve Bulletin the name or names of those countries, dependencies, or possessions in which banks or

bankers are authorized to draw on member banks whose applications have been approved for the purpose of furnishing dollar exchange.

The Federal Reserve Board reserves the right to modify or on 90 days' notice to revoke its approval either as to any particular member bank or as to any foreign country or dependency or insular possession of the United States in which it has authorized banks or bankers to draw on member banks for the purpose of furnishing dollar exchange.—[Regulations of the Federal Reserve Board, Series 1924.]

(a) When was provision made by statute for this type of acceptance? (b) Explain where these drafts are drawn and show how they are handled. (c) Make a list of the countries in which this type of draft may be used in financing foreign trade. [Students are referred to Annual Reports of Federal Reserve Board and Federal Reserve Bulletin.] (d) To what extent have banks used this method? In what federal reserve districts has it been used principally? (e) Why are such drafts needed in financing foreign trade between the United States and certain countries?

387. Theory Underlying Certain Banking and Exchange Operations

The Morgan bank granted the French Government a loan of 100 million dollars, redeemable in 25 years, and guaranteed only by French credit. The issue of this loan was authorized by a law dated November 21, 1924. Article 3 of this law provided that the returns from the loan should be handed over to the Bank of France in repayment of its advances to the Treasury. A convention, dated December 22, 1924, between the State and the Bank stipulated that the sum of 89 million dollars, the net sum secured from the loan, should be used for two distinct purposes, First, at the rate of 5 francs 18, the value of the dollar at par, the sum should be used to repay advances by the Bank of France to the State. Second, the State could use for the defence of the franc the difference on each dollar between 5 francs 18 and the current quotation.

At the end of 1924 the sum of 160 million francs was available for the defence of the franc; this sum was made possible through the amount available on the Morgan loan and through the profits resulting from exchange transactions. In 1925 the profits were used up but the Morgan loan remained intact until May, 1926, the date when the Government decided to use part of it to improve the condition of the franc. In the few weeks following this time 56 million dollars of the loan were spent. The francs secured in return were handed over to the Treasury in the proportion of 1000 million francs on June 1st, 1926, 15 millions on June 2nd, and 407 millions on June 30th. There remained of the Morgan loan the sum of 33 million francs.

As soon as the Herriot government, which lasted only two days, entered into office on July 20th, it found the Treasury to have only a margin of 150 millions within the maximum legal authorization of 38.500 millions. It proposed that the remaining 33 million dollars of the Morgan loan be ceded to the Bank of France at the current rate of exchange. This would assure a margin of 1,500 million francs which could be used to meet obligations falling due at the end of the month.

(a) Explain the theory underlying these statements.

388. Relation of Exchange Rates and Par

At the time of this writing (January 3, 1925), the London-New York telegraphic register transfer rates quoted as 4.75, or only 2.2% below gold parity. The South African Telegraphic transfer buying rate is 3½% discount, and the selling rate is 2⅝% discount, making the mean rate between the buying rate and the selling rate 3.06 discount; so that the South African pound today is 0.86% above gold parity. It has, in fact, been within 2% of gold parity ever since your commissioners left London in the latter part of November.—[From Report of South African Gold Standard Commission, Cape Town, January 16, 1925. See Fed. Res. Bul., Mch., 1925, p. 173.]

(a) Explain the terms in the above quotation and make the calculations indicated.

CHAPTER XV

FINANCING FOREIGN TRADE

389. Methods of Paying for Goods Purchased Abroad

Broadly speaking there are four methods of paying for goods purchased abroad:

1. The purchaser remits with the order.
2. The purchaser opens a bank credit in favor of the manufacturer.
3. The manufacturer ships the goods on open account and awaits remittance from the purchaser.
4. The manufacturer draws a draft on the purchaser.

(a) The first plan can be used only by those who have large capital resources: why? (b) The purchaser finds the second plan burdensome, because (1) he needs all his local credit to keep his store stocked, (2) interest charges run against him from date the bank pays for the goods until the purchaser pays for them, and (3) the bank charges a commission for the credit. Which of these drawbacks are obviated by using the first method? (c) Under the third method all the brunt of financing falls upon the manufacturer: how will he finance himself until his accounts receivable are paid? (d) The fourth method is most popular, because the credit of the purchaser is combined with the credit of the manufacturer, and by combining their signatures they can jointly obtain the additional credit which they both need: show how this is carried out.

390. Methods of Facilitating International Credits

The Brussels International Financial Conference (1920) made the following recommendations:

"1. Unification of the laws relating to bills of exchange and bills of lading;
2. The reciprocal treatment of the branches of foreign banks in different countries;
3. The publication of financial information in a clear, comparative form;
4. The examination of claims by the holders of bonds the interest on which is in arrear;

5. An international understanding on the subject of lost, stolen or destroyed securities;
6. The establishment of an international clearing house;
7. An international understanding which, while ensuring the due payment by everyone of his full share of taxation, would avoid the imposition of double taxation which is at present an obstacle to the placing of investments abroad."

(a) What were the "Hague Rules of 1921" respecting bills of lading? How effective has their application become? (b) In what ways do the several states in the United States discriminate against branches of foreign banks? (c) What is the League of Nations doing by way of publication of comparative financial information? (d) What is the function of the Corporation of Foreign Bond Holders in England? What similar organization exists in France? (e) What difficulties are met in the program of establishing an international clearing house? (f) What is the League of Nations doing to lessen double taxation of international investments?

391. Statement of an Acceptance Bank

INTERNATIONAL ACCEPTANCE BANK, INCORPORATED

(New York City) June 30, 1925

Stockholders' Liability for uncalled subscriptions	$5,000,000	
Cash on hand and due from banks	$4,774,492.07	
Call loans secured by acceptances	4,000,000.00	
Acceptances of other banks	4,071,069.33	
		$12,845,561.40
U. S. Government Securities		12,052,874.08
Collateral loans		3,064,828.20
Loans and advances—Due in 30 days	$7,013,979.40	
Due after 30 days	3,831,426.08	
		10,845,405.48
Other loans and securities		5,916,976.21
Customers' liability for acceptances—(less anticipations)		34,671,511.03
Customers' liability under letters of credit		6,703,824.21
Accrued interest receivable and other assets		206,963.59
		$86,307,944.20
Capital and surplus fully subscribed	$15,250,000	
Capital and surplus paid in		10,250,000.00
Undivided Profits		3,125,733.71
Due to banks and customers		30,119,259.63
Acceptances outstanding		35,832,477.17
Letters of credit		6,703,824.21
Reserve for taxes, unearned discount and other		276,649.48
Liabilities		$86,307,944.20

(a) What do "Stockholders' liability for uncalled subscriptions," and "Capital and surplus fully subscribed" mean? (b) What is the

maximum amount of bills of exchange that this bank can accept? (c) Why is it necessary for this bank to carry such large accounts with other banks? (d) Why are the deposits relatively small? (e) By what authority is this bank supervised as regards: (1) granting of the original charter, (2) volume of acceptances granted, (3) reserves?

392. Occasion of the Passage of the Edge Corporation Act

How are these needs to come, met? European conditions are such that to a large extent our exports must be made on long-time credits. We find evidence of belief among American exporters that the banks should provide funds for the financing of our exports to Europe in such a manner as to place upon the banks the burden of the transaction.

The banks are eager to help. The difficulty is that commercial banks, as custodians of funds, under obligation to repay deposits on demand, are prevented both by law and by sound business practice from tying up their assets in long-time loans. We find this view understood and confirmed by the distinguished bankers among our European guests. American banks are today functioning normally in the financing of a substantial part of our foreign trade. To the extent that what we export is balanced by what we import, banks can very well make the temporary advances required. But the problem of financing the excess of our exports over our imports, the problem of supplying the long-term credits to cover the balance of trade, is not one for the banks alone. Neither can the banks and the merchants solve it alone, because the extent to which merchants and producers can properly tie up their working capital in long-time advances to foreign customers is limited.

To the extent that long-time credits are required, therefore, it is clear that special machinery must be set up and that, while the commercial banker will have an important role to play, a large responsibility must rest with other elements in the population, notably the investment banker, the exporter, the producer of goods for export, and most important of all, the American investor.

To meet the problems of long-time commercial credits, the Committee believes that organizations of the type contemplated in pending legislation constitute a valuable part of the new machinery needed to meet the present emergency. We have discussed at the Conference the possibilities of corporations formed under the provisions of the Edge Bill, the principles of which have been indorsed by a committee of the American Bankers Association and other influential organizations. We recommend that steps be taken to expedite the speedy passage of that legislation.

We have given study also to the powers of the War Finance Corporation as a helpful agency in the present situation. We believe further careful study should be given to both these agencies with a view to bringing about, not Government initiative in this work, but rather the establishment of a co-operative relationship which will give help and encouragement to private initiative and increase the public's confidence in the credit machinery to be set up.—[Report of Committee on Credit and Finance, of the International Trade Conference, Atlantic City, 1919.]

(a) Why did European commerce require long-time credits in 1919 more than in 1913 or 1925? (b) What legal inhibitions pre-

vented our commercial banks from granting the needed long-time credits? what inhibitions from business expediency likewise prevented them? (c) What usance was provided for the credits to be extended by the Edge Corporations? What features in their organization and plan enabled them to grant long-time credits which the commercial banks could not? (d) What provisions were made in the Edge Corporation Act for furnishing credits of a commercial character? of a financial character? (e) What was the War Finance Corporation, and in what ways, if any, did it help finance international trade? (f) What was the history of the First Federal Foreign Banking Association? the Federal International Banking Corporation? (g) What is the nature of the business of the First Federal Foreign Investment Trust? (h) The failure of the Edge Corporations is ascribed to "the risks presented by the uncertain political and economic situation abroad, the doubtfulness of the advisability of extending more credits . . . and the pressure for credit at home." Comment.

393. Types of Bills of Exchange

There are then obviously four possible kinds of bills:

(a) Bill drawn by a banker on a banker.
(b) Bill drawn by an individual on an individual.
(c) Bill drawn by an individual on a banker.
(d) Bill drawn by a banker on an individual.

[Edwards, International Trade Finance, p. 46.]

(a) What name is given to each of the above types? (b) Rank them on the basis of credit risk.

394. Method of Handling the Insurance of Exports to South America

Insurance Policies.—Our procedure, where not specially instructed by a drawer to the contrary, is as follows:—Where only one copy of the Policy or Cover Note is received, this is retained if payable in this country and if we have purchased, or advanced against, the relative Bill. In all other cases it is sent out. When the Policy or Cover Note is handed to us in duplicate, the original is retained here if made payable at home, and *vice versa* if made collectible abroad. Insurance documents should clearly state the risks covered in addition to the usual f.p.a. one, as this information is scheduled by us in drawer's interests. Insurance should be taken out for 10 per cent. more than the invoice value and cover the goods from seller's warehouse to buyer's warehouse, or for 30 days after landing, in order to provide for fire risk at the other end, for which the Bank and its Agents accept no responsibility. This applies with special force to Bolivian shipments.—[Anglo-South American Bank, Ltd., Collection Tariff, p. 9.]

(a) Distinguish between "policy" and "cover note." (b) Give the reasons for the different methods of handling insurance according to whether the policy is in single copy or duplicate? (c) What is meant by "the usual f.p.a. one"? (d) Why should the insurance exceed in amount the invoice value? (e) Why should the insurance policy cover the goods from "seller's warehouse to buyer's warehouse," or "for 30 days after landing"?

395. Export Bills Issued in Anticipation of Purchase or Production of Goods for Export

The method is very simple and is just as advantageous to the American Banking community as the right of acceptance where the import of merchandise to the United States is involved.

It simply reverses the position and places the American Banker on a parity with his European confreres.

A foreign merchant desiring to purchase goods in the United States obtains from his Banker a commercial Letter of Credit prescribing that drafts in liquidation of his purchases in America should be drawn on a Bank in New York or elsewhere, at sixty or ninety days sight with proper documents attached. This transaction would then lie between the accepting American Bank and its European correspondent and is similar in all respects to the credit in favor of the merchant desiring to import merchandise. It can be carried even further than that under the recent ruling of the Federal Reserve Board, that an American merchant desiring ultimately to export merchandise can, under proper arrangements with his Banker, draw on time in anticipation of the actual export, using the funds in the purchase or preparation of his shipment, and when ready actually to export, use the proceeds of the drafts that he draws on the buyer as the buyer's Banker in liquidation of the acceptance. This method has been very extensively used during the present European war and has served its purpose admirably, and due credit must not be withheld from the Federal Reserve Board for giving an intelligent and practical interpretation to the law.—[J. E. Gardin, Commercial Letters of Credit, National City Bank, New York, by permission.]

(a) Weigh the latter interpretation of the Federal Reserve Act. What clause gives warrant for this anticipatory credit transaction? (b) Point out the dangers of such transaction.

396. High Cost of Protesting Bills

Protests, Cables, Etc.—Our Branches and Correspondents have standing instructions to protest for non-payment after acceptance (where this can be done) but not otherwise. Generally speaking, we consider the protest of an unaccepted Bill to be a useless expense. Full protest must usually be taken out within 24 hours of a dishonour. Where goods are refused, our instructions are to store and insure against fire (without paying duties unless their payment cannot be avoided.) It is in many places impossible to insure against the risk of theft and where the goods are stolen while in the Customs, the authorities always decline to accept liability. The Bank cannot allow the use of its name in legal proceed-

ings, and, if necessary, a Power of Attorney in Spanish by the Drawers in favour of the Lawyer employed must be made out and viséd by the proper authorities. The cost of such a Power of Attorney is usually $25. Cable advice of dishonour of Bills over $250 if purchased or advanced against, is usually obtained.—[Anglo-South American Bank, Ltd., Collection Tariff, p. 8.]

(a) Why is the line drawn by this bank between protests for non-acceptance and protests for non-payment of accepted bills? How is the demarkation related to the insurance of the goods? (b) Explain: "Cable advice of dishonour of Bills over $250 if purchased or advanced against, is usually obtained."

397. Exporter's Advantage from Foreign Resident Agent

DRAWERS' AGENTS.—Clients should be careful to advise us of the appointment of any agent abroad and the exact extent of his powers, also of the termination of any such agency. It will be found that business of any bulk in Central or South America can only be conducted satisfactorily if Drawers have a local resident agent fully conversant with clients and trade customs, who can settle any difficulties which may arise and who is empowered to take over for resale, any goods refused, on giving an undertaking to the Bank to account to them for the proceeds.—[The Anglo-South American Bank, Ltd., Collection Tariff, p. 8.]

(a) May the exporter appoint the South American Branch of his bank as his agent resident? Why is it better to have an agent other than the bank?

398. Interest Charge for Delay in Acceptance or Payment of Bills Drawn in Export Trade to South America

INTEREST for delay in acceptance (or payment where the Bill is at sight) owing to the late arrival of the goods, cannot be claimed from Drawees in Central and South America. Therefore, every Bill, and especially non-documentary ones, should state "Goods per s.s.....," or "Goods per Parcel Post on....." for the guidance of our Branches or Correspondents. Shipments per fast steamers to the East Coast usually arrive simultaneously with the Documents, but goods shipped via Straits of Magellan for West Coast Ports take longer to arrive than Documents (which are sent via the Andes or Panama.) (*The delay in arrival of goods per mail steamer to Central Chile may be put at one month. This allowance must be increased for more northerly ports or for cargo boats.*)

The normal course of post is:—

Central America,	generally	7	to 10	days.
Ecuador,	"	12	" 15	"
Bolivia,	"	20	" 25	"
Punta Arenas,	"	30	" 45	"
Rest of Chile,	"	20	" 25	"
Colombia,	"	12	" 16	"
Peru,	"	17	" 20	"
River Plate,	"	25	" 35	"
Brazil,	"	20	" 33	"

The Legal Rate of Interest in South America is generally 6 per cent. per annum. Rebate for payment before due date is usually allowed at this rate.—[The Anglo-South American Bank, Ltd., Collection Tariff, p. 7.]

(a) Where should the burden of delay between arrival of documents and goods be placed, on the drawer or drawee? (b) Why is it important to specify the exact ship on which the goods covered by the bill are shipped? (c) If a bill drawn for 60 days' sight, documents against payment, is paid on date of acceptance, by how much is the face of the bill reduced?

399. Refinancing Acceptance

The American Exporting Company sold a bill of goods amounting to £10.000 to an importing firm in Liverpool, England. The exporting company drew a 90-day draft on the English importing company. The New York bank took drafts only for collection. The rate of interest on bankers' acceptances at that time was 4½%. The draft was not paid by the English importer until maturity. In order that the exporter might secure funds at the present time the New York bank entered into a refinancing acceptance agreement.

(a) What is a refinancing acceptance agreement? (b) If the bill accepted under this agreement was a 90-day draft, what net proceeds would the exporter receive? (c) How and where will the exporter dispose of the draft he has drawn and which has been accepted by the New York bank? (d) From what source would the New York bank secure funds with which to pay off this acceptance at maturity? (e) In what way is this method of financing more favorable to the bank than in discounting the original draft drawn on the British importer by the American exporter?

400. The Trust Receipt

A trust receipt is a credit instrument used very generally by bankers where a customer desires to obtain custody of certain documents of title covering merchandise or securities held by the banker as owner pending repayment of advances made by the banker in obtaining possession. Usually the custody is desired in order that some specific act may be performed.

(a) Show how such receipt would be used in case a bank customer wanted to remove some goods from a railroad or steamship to a warehouse, and the bank held the bill of lading.

(b) Show how it may be used in case a bank customer wanted to remove goods from a warehouse and deliver them to a purchaser, and the bank held the warehouse receipt. (1) If a banker releases prop-

erty upon trust receipt to a merchant who has negotiated a loan with him, pledging a warehouse receipt for merchandise stored as security for the loan, but does not have the trust receipt recorded, the banker has no security which he would not have as holder of an unrecorded chattel mortgage. Under court decisions of this tenor what importance attaches to a trust receipt under the circumstances named?

(2) If a banker releases property which he does own, having gained title from some third party who is in no way responsible for the loans made against it, the kind of title he has is all important. In such a case if the merchant, after obtaining the merchandise on trust receipt, sells any of it to a third party *without notice to such buyer* that the goods are held subject to a trust agreement, the right of the bank to collect the amount due from the buyer may be subject to the buyer's right of offset. Furthermore, if the merchant hypothecates any of the merchandise covered by the trust receipt as security for further advances made in good faith, the right of the bank to recover the merchandise from the new creditor will be subordinated to the repayment of the advances made by such creditor against the merchandise. With these exceptions the courts imply in such cases that if the merchandise or its proceeds can be traced and identified, the banker may retain his rights over it or the proceeds thereof against all creditors of the merchant until the obligations which the property secures have been fully paid. In practice how important are these exceptions?

(c) In issuing a trust receipt the banker should take the following precautions:

1. To remember that the moral risk of the customer is the greatest factor of safety.
2. To include in the trust receipt a description of the property released, sufficient and definite enough to insure its identification should necessity arise.
3. To include in the trust receipt a careful description of the documents released, in addition to the description of the property itself.
4. To provide for the segregation or earmarking of the goods covered by the trust receipt, and, in case of their sale, for an effective method of indicating that the proceeds, in whatever form they may be, have arisen through the sale of the particular goods released.
5. Not to use the trust receipt in connection with the release of goods going into manufacture, where their identity will be lost.
6. To see that, in cases where trust receipts are used in lines

where notes and trade acceptances are given in settlement of trade terms, that these acceptances or notes are promptly delivered to the banker in place of the property for whose payment they have been given.

7. When used in connection with demand obligations, to give the trust receipt a definite maturity date dependent upon the circumstances under which the property has been released.
8. To see that the merchandise released is well covered by insurance.
9. To observe the differences of state law and court decisions with respect to trust receipts.

Give the reasons behind these various precautions.

401. Advantages of the Trust Receipt

The following are considered as special advantages from the use of the trust receipt: (1) That renewals of obligations secured in this manner are practically unknown unless arranged for at the time the transaction is initiated; that the banker is assured that his advances on trust receipts represent current self-liquidating transactions. (2) That the signer of the trust receipt feels especially bound morally since he is required by its terms to account for property entrusted to him for a specified purpose.

(a) Analyze these alleged virtues and evaluate their importance.

402. Guaranty of Letters of Credit by National Banks

. . . practice . . . by which certain national banks, in order to accommodate their customers, request other banks or banking companies to issue letters of credit to the customer for large amounts, in some cases for millions of dollars, the bank making the request either uniting with the customer in the undertaking that funds will be provided for protection of the drafts drawn by virtue of the credit on the accepting bank or giving a separate guaranty to such bank that funds will be so provided and that the customer's agreement will be faithfully fulfilled and performed at the time and in the manner provided in his undertaking.—[Report of the Comptroller of the Currency, 1920, p. 78.]

(a) Why should the Comptroller of the Currency brand this practice as "reprehensible"? (b) In the light of the following decision is the action legal? Bowen *v.* Needles, 94 Fed. 925: "It may be said in general that no banking corporation has the power to become the guarantor of the obligation of another, or to lend its credit to any person or corporation, unless its charter or governing statute expressly permits it." (c) Morse, on Banking, section 5: "Neither as included in its powers nor incidental to them is it a part of a bank's business to lend its credit. If a bank could lend its credit as well as its money,

it might if it received compensation and was careful to put its name only on solid paper, make a great deal more than any lawful interest on its money would amount to." What is meant by lending its credit? Does accepting bills drawn on a bank come under this prohibition?

403. Limitations on Letters of Credit and Acceptances

The attention of this office has been called to a recent practice of certain national banks by which letters of credit are issued to their customers in amounts largely in excess of 10% of the banks' capital and surplus, with the agreement on the part of said banks to accept drafts drawn on the issuing bank to the extent of the credit.—[Report of the Comptroller of the Currency, 1920, p. 77.]

(a) What is the limitation on the amount of loans to one borrower, under the national bank act? (b) What is the limitation on the amount of letters of credit that may be issued by a national bank in toto, and to one customer? (c) What is the fundamental difference between operations of a bank (1) where it lends on the borrower's promissory note and credits the loan to his account, subject to check when, as, and if needed; (2) where it establishes a "line of credit," promising to accommodate the borrower at any time within the next six months up to a certain amount on 90-day loans at 6%; (3) where it issues a "letter of credit" obligating itself to accept bills of a certain tenor, up to a stated amount, at any time during the next six months? (d) Suppose a bank has accepted bills for one customer in excess of 10% of its capital and surplus and that customer fails to supply the bank with funds before maturity of the bills: do the bills then become loans and subject to the 10% limitation and therefore illegal? (e) If the amount of the bill exceeds the liquidation value of the goods covered by the attached documents, what security does the bank have for the excess? How can collateral be used to support such operation?

404. Financing Exportations under Bills Drawn "Payable at the Drawee's Buying Rate for Sight Drafts on New York"

An American exporter A ships merchandise to Rio de Janeiro in an amount of $20,000 payable on date of shipment, with interest at 5% for delay in payment after that date. Settlement is to be effected by 60-day sight bill, drawn in dollars by A on the Brazilian importer B. The amount of the draft, if it is to yield $20,000 to A, must cover the following: (1) $20,000 for the goods; (2) interest on $20,000 for 60 days plus mail time to Rio plus mail time from Rio to America again at 5%; (3) C's commission at ¼%.

(a) Having estimated the time interval, calculate the face of the draft. (b) What difference will it make in the amount received by A if C takes the draft for collection rather than discounts it directly? (c) On the date of maturity B must remit to America enough to cover this bill. If the exchange rate in Rio is on that date 3.25 milreis per dollar, what will it cost B to settle in milreis? (d) Under this scheme who bears the risk of fluctuation of exchange rates during the period of the bill and mail time? Show how, by hedging, this risk may be shifted? (e) If the bill had been drawn in sterling instead of dollars, would the risks have been greater or less?

405. Bank Charges for Issuing and Handling Letters of Credit

At the request of the New York Cutlery Company, the X National Bank of New York issued a confirmed letter of credit amounting to $50,000 in favor of the Birmingham Cutlery Company, drafts drawn under authority of letter to be 60- and 90-day sight bills. Assume that the letter was confirmed by Barclays Bank, Limited. The following drafts were drawn on the X National Bank:

1. A 60-day sight draft, bill of lading attached, amounting to $10,000.
2. A 90-day sight draft amounting to $20,000.
3. A second 60-day sight draft for $20,000.

(a) What different commissions did the New York Cutlery Company have to pay, and what was the rate of each? (b) Compute the approximate amount of commission that each bank receives normally under such a letter of credit. (c) When and how will the letter of credit be cancelled and returned to the issuing bank? (d) How may drafts drawn under this letter be presented to the X National Bank for acceptance? (e) What generally becomes of the draft after it has been accepted? Who is said to be financing these shipments?

406. Financing Coffee Imports Through a Third Country

The United States Coffee Company contracted with the Brazilian Coffee Company, of Rio de Janeiro, for $100,000 worth of coffee, settlement to be effected by 90-day sight drafts valued on the Midland Bank of London, drawn by authority of a sterling letter of credit.

(a) As the representative of the United States Coffee Company, explain carefully how the letter of credit will be opened and forwarded to the Brazilian Coffee Company. (b) What will be the approximate rate of commission charged by each bank in this case? What will be the actual amount in dollars? (c) When and how does the Brazilian Coffee Company usually secure payment under arrang-

ments of this nature? (d) How will the draft or drafts be presented for acceptance? (e) Trace the shipping documents until they are received by the United States Coffee Company. (f) How many and what banks may participate in this transaction?

407. Financing an Importation from the Far East by Sterling Exchange

An American importer A through his local banker B has a London bank C open a credit in favor of an Indian exporter D for shipping jute from Calcutta to New York to A. D, on the authority of the letter of credit, ships the jute, draws a 90-day £1,000 sight bill on C, attaches the documents, and sells the bill to his Calcutta banker E for rupees. E sends the documents to B, and the draft with duplicate documents to C for acceptance, who upon accepting it removes and keeps the duplicate documents and delivers the draft to E's representative in London.

(a) If, according to instructions, E's representative sells the draft on the date of acceptance, how large a credit will E get in London, provided the discount rate is ½% and the stamp charges 1/20%? (b) If A settles with B by purchasing a demand draft 12 days before maturity of the above draft at $4.76, what will the jute cost A, provided A pays B a commission of ¼%?

408. Financing Imports

On October 1, 1926, Patterson Brothers, a New York hardware company, wished to import $50,000 worth of cutlery from the Birmingham Cutlery Manufacturing Company, Birmingham, England. The shipment was to be made on November 15, 1926, and the transaction financed by means of an irrevocable, confirmed letter of credit. It was agreed that the exporter should draw 90-day sight drafts on the Horner Bank, London.

(a) Show completely how Patterson Brothers opened this letter of credit through the New York bank. (b) Show how the Cutlery Company of Birmingham drew and discounted their drafts in Birmingham, and how, in turn, that purchaser forwarded the drafts to the Horner Bank for acceptance. (c) When the draft reached the Horner Bank it had attached the so-called "commercial set." Indicate how: (1) The Birmingham Bank might have disposed of the draft after acceptance by Horner Bank. (2) Patterson Brothers in New York got possession of the shipping documents (commercial set) and hence the shipment of cutlery. (d) How did the American importer provide and transfer funds to the Horner Bank in London to pay off this acceptance at maturity?

409. Advantages of Using Dollar Credits

The Dollar Credit is of capital importance to every American merchant who is interested either directly or indirectly in the importation of commodities of any character. A study of the advantages accruing from this form of credit will demonstrate the desirability of its general employment as the vehicle for financing not only our own imports but also those of other countries. Primarily, it is more economical than the Sterling or Continental Credit, for the initial commission cost of issuance is lower. Secondly, it is based on a known quantity, the Dollar, a factor of supreme importance in these days of extreme and violent fluctuations in the exchange rates, and therefore all exchange risk is eliminated from the operation as far as the importer is concerned. Maturities drawn under Dollar Credits are due and payable in Dollars on a given date, and no question arises as to what the exchange rate on London may be 90 days after acceptance of the bill.

Under existing conditions in the New York money market, and considering the present low rates of interest actually in effect, the use of Dollar credits is proving to be particularly attractive to the American importer as a medium for financing his importations. The rate of discount in New York for prime bank acceptances is 2⅛@2¼% per annum, and a broad, well-developed discount market now exists, with an ever-increasing demand in evidence for this class of paper. On the other hand, the rate of discount in London for prime 90-day bills is 4¾% per annum, with operations restricted in a far from normal market. A comparison of these two discount rates will show a difference in favor of New York of 2½@2⅝% per annum. In addition to this difference in interest, there is also a difference in the initial cost in the form of commission for issuance, as between credits available by 90-day drafts drawn on New York in Dollars and those available by 90-day drafts drawn on London in £ Sterling. This difference in commission in favor of New York will average ½% per annum, and when added to the saving in discount or interest already noted, will show a net saving on the Dollar Credit of 3@3⅛% per annum, which accrues to the importer through the use of Dollar Credits in his operations.

Quite apart from the direct economy to the individual resulting from the use of Dollar Credits, is the broader question of the economic value accruing to the nation as a whole through the designation of the Dollar as the basis of value in our credit transactions with the rest of the world. Since 1903, when the total of our imports amounted to $1,025,719.237, the volume of our imports has increased rapidly, and in 1914, the total imports reached the enormous sum of $1,893,925,657. These figures cover products from all parts of the world shipped direct to our own shores, and while no nation enjoys higher international credit than the United States, yet it is a fact that in order to finance the movement of our imports we have been compelled to have recourse to indirect channels and call on foreign money centers to furnish us with the necessary credit facilities to take care of a large part of our importations. Naturally, we have been obliged to pay for this accommodation, and the service has cost us millions of dollars annually in interest, commissions, etc.

These charges can be saved and an important economy effected, thus benefiting our commerce as a whole by the general designation of Dollars in our foreign credit transactions.—[J. T. Cosby, Dollar Credits, 1915, National City Bank, New York, by permission.]

(a) Why is the initial commission cost of issuance alleged to be lower on dollar than on sterling credits? (b) Does the argument for dollar credits that dollar purchasing power is more stable than sterling purchasing power still hold true? (c) Compare the discount rate on prime bank acceptances and determine whether it is still an advantage to finance importations in New York rather than in London. (d) What proportion of our trade is now financed on dollar credits? How much are we saving to ourselves by way of commissions, etc., thereby?

410. Financing Importation from Far East by Dollar Acceptances

An American importer A buys tea from Singapore to an amount of $25,000. A arranges a letter of credit with B authorizing A to draw upon it for four months' sight to that amount. B cables to its correspondent in Singapore an advice that it has issued the credit on such and such terms. The Singapore bank notifies the local exporter of the issue of the credit. The Singapore exporter then ships the tea, draws a draft on B for $25,000, attaches the documents, and sells it for local currency to the Singapore bank. The Singapore bank sends the draft and documents to its American agent with instructions to present it to B for acceptance. In accepting it, B removes the documents and delivers the bill to the presenting agent, who following instructions offers it for sale in the American market. The proceeds are credited to the account of the Singapore bank in B.

(a) Calculate these proceeds, if it is discounted one month after acceptance and the discount rate is 4%. (b) Suppose the acceptance is rediscounted with the federal reserve bank one month later, calculate the price paid by the federal reserve bank rediscounting at 3½%.

411. Financing Cotton Exports

The British Cotton Importing Company of Liverpool, England, has decided to purchase $100,000 worth of cotton from the Metropolitan Cotton Exporting Company of New York, financing the transaction by means of a confirmed dollar letter of credit.

(a) State specifically the banks in each country which may be called upon to consummate this transaction. (b) What is the first agreement to be made in the sale of this cotton? (c) Outline carefully the procedure followed by the British Cotton Importing Company in opening this letter of credit, tracing the letter of credit through its various stages until it is placed in the hands of the Metropolitan Cotton Exporting Company. (d) Show how the exporting company draws the drafts under the letter of credit and how it disposes of

them. How soon can the exporter secure his funds and under what conditions? (e) How does the exporting bank dispose of the draft? Who is financing this transaction? Why?

412. Financing an Exportation from the United States to England by Sterling Exchange

An American exporter A, exporting to an English importer B a cargo of lumber, draws a draft for 60 days' sight on the English bank C at which B has arranged for due acceptance when presented, and sells it to D, his American bank.

(a) Calculate the price of the draft, being given the following data:

The London discount rate for 60-day sight bills, 6%.
New York rate for demand drafts on London, $4.76.
English stamp charges, 1/20%.
Margin of profit for the New York bank, ¼%.
Commission charged to account of D by C, 1/40%.

413. Financing Exportations by Dollar Acceptances

A Brazilian importer A arranges through his bank B for the issue of a letter of credit by a New York bank C in favor of an American exporter D. According to this authority D ships a cargo of machinery to A, draws a draft on C for 60 days, attaches the documents to the draft, and presents it to C for acceptance. After accepting it, C discounts it at the market rate of 7½%.

(a) Calculate the proceeds. (b) Explain that the risk of exchange fluctuations between New York and Rio is by this arrangement shifted to the Brazilian.

414. Guaranty of Export Credits

The Export Credits Guarantee Department, of the Department of Overseas Trade, of the British Board of Trade, guarantees the payment at maturity of sterling bills of exchange drawn on buyers overseas in connection with the export from Great Britain of goods wholly or partly produced or manufactured in the United Kingdom, including coal. Applications are considered for long term as well as short term credits. Subject to conditions, some of which are specified below, exporters may obtain in approved cases: (1) *Facilities of an insurance character,* by which the guarantee is given without recourse to the exporter. In these cases the guarantee will not exceed 75% of the amount of credit granted to the importer. (2) *Facilities of a financial character,* by which the guarantee is given with full recourse to the exporter. In these cases the guarantee may be for the full amount of the credit granted to the importer. (3) *Facilities of an intermediate character,* by which the guarantee is given for the whole or part of the credit either with or without recourse to the exporter or with such recourse as may be agreed upon. In these cases the exporter will not

be relieved of more than 75% of the risk on the bill unless approved security is provided. The guarantee is either indorsed on the bill or is given in the form of a letter of guarantee. The Department makes good its guarantee immediately its liability accrues, provided the protested bill is held at its disposal.

The Department's facilities include *Specific guarantees,* that is, in respect of specific transactions; or *General guarantees,* that is, guarantees up to a certain amount for transactions with a number of importers in a particular country or countries with or without the submission for its approval of the importers' names; or *Guarantees to banks or credit insurance companies,* that is, guarantees against loss on specific transactions, approved by banks, bankers, credit associations, or companies providing credit insurance. [Abridgement of Official Circular, 1925.]

(a) The Department is prepared to consider proposals and to indicate its decisions, in principle, either before or after orders have been received by exporters or tenders have been submitted by them. Why is this desirable from the exporter's point of view? (b) Why does the Department limit its guarantees to goods wholly or partly produced or manufactured in the United Kingdom? (c) Why does it discriminate against goods shipped on consignment? (d) The Department's approval of an application ceases to be operative after a definite period stated in each case: why is this made a condition? (e) The Department charges a premium, varying with the assistance given and other circumstances of the case: suggest factors which will make for low premiums. (f) In cases where the Department retains recourse to the exporter, this recourse is for an agreed percentage of the amount of the bill, and the exporter must in case of default of the importer pay on demand this percentage to the Department: what is the purpose of recourse? how should it affect the premium paid? (g) The exporter undertakes to take such steps as the Department may require to enforce payment by the importer or to realize on any security: why should this obligation be put on the exporter? (h) All bills for guarantee must be sent to the Department through a bank immediately after the shipment of the goods concerned, and must be accompanied by all signed copies of the bill of lading, invoices, and other shipping documents, together with the form of agreement (covering the guarantee) duly completed: why send them through a bank? (i) The Department does not normally require a bill to be accepted before guaranteeing the bill, though it may do so, or it may retain full recourse against the exporter until acceptance: is there special risk in guaranteeing before acceptance? (j) The Department's guarantee is given on the express condition that the importer has agreed to accept the bill, and that the bill will be duly presented for acceptance and/or payment, and that if dishonored it will be noted and/or protested, and notice of dishonor given forthwith to the De-

partment: why are these provisions necessary? (k) Except as otherwise agreed in exceptional cases, the goods are to be insured by the exporter against all risks with an approved company or with Lloyds' Underwriters: why does not the Department guarantee the goods against these insurable risks too? (l) The exporter is at liberty to insure elsewhere any portion of the risk not covered by the Department, but such insurance is to be disclosed to the Department: why is it important that the Department know of the other insurance? (m) What was the occasion of the British Government undertaking the guarantee of export credits? Is it in the nature of a subsidy to the export trade?

415. Commercial Banks Establishing Foreign Branches

The American incorporated commercial banking enterprises which have established or acquired foreign branches and have accounted for practically all of the American foreign banking expansion include national banks, state trust companies, and foreign banking corporations incorporated under state laws. The national banks were: The Chase National Bank of the City of New York, the Commercial National Bank of Washington, D. C., the First National Bank of Boston, and the National City Bank of New York. The state trust companies were: the Bankers Trust Company, the Empire Trust Company, the Equitable Trust Company, the Farmers' Loan and Trust Company, the Guaranty Trust Company, the Jarvis-Conklin Mortgage Trust Company, and the North American Trust Company (name changed in 1905 to Trust Company of America)—all in New York City. The foreign banking corporations included the American Foreign Banking Corporation, the Asia Banking Corporation, the Bank of Central and South America, the Continental Banking and Trust Company of Panama, the Equitable Eastern Banking Corporation, the International Banking Corporation, the Mercantile Bank of the Americas, and the Park-Union Foreign Banking Corporation.—[Phelps, Foreign Expansion of American Banks, pp. 6-7.]

(a) Which of these companies are still extant and have branches? (b) In what region did (does) each company operate abroad? (c) Of the foreign banking corporations which ones were sponsored by existing American banks? What was the reason for organizing such a company alongside?

416. Theories of the Nationality of a Bank Doing International Business

(a) The American doctrine: a corporation being an artificial creature of the law can have no other nationality than that conferred upon it by the laws of the country. According to this doctrine, what would be the nationality of a bank incorporated under the laws of Italy by five Spaniards?

(b) "No foreign country has adopted this criterion of nationality,

Spain will not allow a foreign corporation chartered as Spanish to escape the obligations of a foreign society. France will not permit a French corporation organized under the laws of England to operate in France as an English corporation. The foreign court always decides for itself, according to its own special criterion, upon the nationality it shall assign to a bank, and the bank is taxed, called upon to fulfill certain formalities, and has rights and obligations according to the nationality assigned to it." Explain the following theories of nationality: (1) the "center of exploitation" theory; (2) the "home office" or "siège social" theory; and (3) the "control" theory. Which theories are held by the leading countries respectively?

(c) Suppose several Americans incorporate a bank under the laws of Italy and establish branches in New York, Paris, Brussels, and Madrid. They live in Spain directing the business from Madrid and after some time it happens that the branch at Paris does most of the business year after year. What would be the nationality of the bank and its branches? (d) What opportunity for the League of Nations appears here? (e) Should the following be classed as American banks simply because they are incorporated in New York: The Anglo-South American Trust Company, The Banca Commerciale Italiana Trust Company, The Banco di Sicilia Trust Company, The Bank of Athens Trust Company, The Italian Discount and Trust Company, The Trust Company of North America? With what foreign bank is each of these banks intimately associated?—[Based on Phelps, Foreign Expansion of American Banks, p. 12.]

417. American Investment Banks in the Foreign Field

Examples: I. *Incorporated:* General Motors Acceptance Corporation. (a) What is the nature of the operations of this corporation?

II. *Private:* Harris, Forbes & Company. (a) What is the character of the operations of this house? Does it buy its securities outright and then sell them to its customers, or does it act as broker for its customers? (b) Where is its branch located? When was it founded? (c) Have any other American private investment houses established foreign branches? Do they employ the commandite method of control? the affiliate method? (d) What is the relation between Pynchon and Company of New York and Pynchon and Company of London? of J. P. Morgan and Company of New York and Morgan Harjes and Company of Paris? (e) Are any of the partners of J. P. Morgan and Company Englishmen? (f) Is there any relation of ownership, control, or affiliation between Brown Brothers and Company of New York and Brown, Shipley and Company of London?—[Based on Phelps, Foreign Expansion of American Banks, pp. 7-11.]

418. American Banks Employing Representatives Abroad

Banks which have built up an appreciable business, or which hope to increase their business, with certain foreign centers employ other methods of foreign banking contact in addition to their foreign correspondents. One of these methods is that of locating a representative's office in a foreign city. Such foreign representatives' offices differ from a branch bank in that they do not receive deposits nor engage in the regular banking operations which bring a branch into active competition with the native banks. They act rather as "service stations" . . . sending information to the home office, aiding American commercial travelers and tourists abroad, and bringing the home bank's correspondents in foreign cities into closer relations with it.—[Phelps, Foreign Expansion of American Banks, p. 24.]

(a) With respect to cooperation and competition with correspondents, contrast the system of representatives with that of establishing branches or subsidiaries or buying control of native banks. (b) Look up the system employed by the American Exchange Irving Trust Company of New York, and of the National Bank of Commerce of New York. (c) Is the expense of this system of representatives high relatively to what it would be for operating a branch?

419. The Commandite Method of Foreign Banking

The commandite method consists in buying an interest, usually a controlling interest, in a native bank in that foreign market with which a bank wishes to improve its relations. The native institution in which the bank secures control is called a commandite and the process is called commanditing. The commandited native bank may retain its external appearances and its good will but it is directed to a greater or lesser degree by the bank which has gained control of it.—[Phelps, Foreign Expansion of American Banks, p. 28.]

(a) What New York banks were commandited by the big German banks before the war? (b) The policy of commanditing is often adopted because it is both an easy and cheap method of entering the foreign country: show in what respects this is true. (c) Is the commanditing bank fully responsible for the commandited bank? Does this commandite method offer entrance into the foreign field at less risk? (d) Why has this method never become popular? Does any American bank now use it?

420. The Subsidiary Method of Entering Foreign Banking

The foreign subsidiary or the domestic subsidiary corporation with foreign branches is another method of foreign banking expansion which has been employed by the great banks of the world. A subsidiary is an establishment entirely owned and controlled by the parent institution or institutions. Unlike a branch it is a separate corporation.—[Phelps, Foreign Expansion of American Banks, p. 31.]

(a) What is [was] the ownership of the following: The Equitable Eastern Banking Corporation, the Park-Union Foreign Banking Corporation, the American Foreign Banking Corporation? Did these establish branches? (b) What is the ownership of the following: The First National Corporation, the Shawmut Corporation of Boston? (c) Give examples of the employment of subsidiaries by the great German banks. Did the banks cooperate in establishing these subsidiaries? When a bank, like the Bank fuer Chile und Deutschland, located at Hamburg, was established, what was to be its special function? What was the purpose of establishing subsidiaries in foreign places, for example, the Deutsch Asiatische Bank at Shanghai? (d) Show how the subsidiary system reduced the risks of entering foreign regions. (e) If a country forbade the establishment of branches within it by foreign banks, how could the subsidiary system be used? (f) If a country taxed a branch on the basis of the entire capital of the parent and branch, how could the subsidiary system be used to advantage? (g) May a subsidiary of a national or state bank located in China issue bank notes? May the national or state bank having a branch in China issue notes in China? (h) Why do subsidiaries owned jointly by American banks not succeed? What is the record, and what was the ownership at first, of the following: the American Foreign Banking Corporation, the Asia Banking Corporation, the Bank of Central and South America, the Continental Banking and Trust Company, the Mercantile Bank of the Americas, the Park-Union Foreign Banking Corporation?

CHAPTER XVI

INTERNATIONAL MOVEMENT OF CAPITAL

421. The International Gold Movement 1902-25

GOLD RESERVES OF THE PRINCIPAL COUNTRIES

($000,000)

At End of Year	UNITED STATES			EUROPE						
	Total Stock	In Treasury and in Federal Reserve Banks	In Circulation	Bank of France	Reichsbank	Great Britain: Bank of England and Currency Notes Reserves	Russian State Bank	Bank of Spain	Banks of Italy, Sicily, Naples, and Nat'l Treas.	Austro-Hungarian Bank
1913.....	1,924	262	1,661	679	279	170	787	92	288	251
1921.....	3,657	3,021	635	690	237	764	0	485	211	16
1925.....	4,409	2,870	1,538	711	288	703	94	490	219	12

	ELSEWHERE			
	Canada: Minister of Finance and Chartered Banks	Argentine Government Conversion Fund	Domestic Holdings of Bank of Japan and of the Government	Total of the Aforegoing and All Other Banks and Treasuries
1913.....	143	225	65	5,421
1921.....	155	450	610	8,424
1925.....	203	436	576	9,343

GOLD MOVEMENT

(1) In the 12 pre-war years 1902–13:

Excess of:	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	Total 1902–13	
Mdse. exports....	391	489	415	447	477	500	636	252	303	560	581	691	5,742	
Silver exports.....	23	17	24	22	17	16	10	11	11	22	24	26	223	
Total net exports	414	506	439	469	494	516	646	263	314	582	605	718	5,966	
Gold imports.....	8	21	....	3	109	88	....	....	0	20	19	....	268	84 net
Gold exports.....	...	....	36	....	....	....	31	89	....	....	....	28	184	imports
Gr. total net exp.	406	485	475	463	385	428	677	352	314	562	586	746	5,879	

(2) In the 5 war years 1914–18:

Excess of:	1914	1915	1916	1917	1918	Total	
Mdse. exports	324	1,776	3,091	3,281	3,118	11,590	
Silver exports	25	19	39	30	181	294	
Total net exports	349	1,795	3,129	3,311	3,299	11,883	
Gold imports	...	420	530	180	20	1,150	985 net imports
Gold exports	165	.....	.....	.....	.....	165	
Gr. total net exp.	515	1,374	2,599	3,131	3,279	10,898	

(3) In the 7 post-war years 1919–25:

Excess of:	1919	1920	1921	1922	1923	1924	1925	Total	
Mdse. exports	4,019	2,950	1,976	721	376	980	682	11,704	
Silver exports	150	25	.....	...	...	36	29	240	
Silver imports	.....	.....	11	8	2	.....	...	21	
Total net exports	4,167	2,975	1,965	713	374	1,016	711	11,921	
Gold imports	.....	94	667	238	294	258	...	1,551	1,125 net imports
Gold exports	292	.....	.....	...	...	.....	134	426	
Gr. total net exp.	4,459	2,881	1,298	475	80	758	845	10,796	

(4) Grand total 12 years 1914–25:

Mdse. exports	23,294	
Silver exports	534	
Silver imports	21	
Total net exports	23,804	
Gold imports	2,701	2,110 net imports
Gold exports	591	
Gr. total net exports	21,694	

(a) What was the average excess merchandise export balance of the United States before the war, between 1902 and 1913? during the war, 1914 to 1918? in the post-war period, 1919 to 1925? Were the changes in physical volume of exports and imports during this period as great as the change in dollar value of exports and imports? (b) What was the average amount of net gold imports in each of the three periods? (c) Some politicians use the favorable balance of trade as an argument for the protective tariff. Is there any confirmation of this theory in the above figures of merchandise and gold balances? (d) Account for the anomalous year 1919, with an unprecedented favorable balance of trade, with an unprecedented adverse balance of gold shipments, with prosperity everywhere in the United States. (e) Account for the year 1923, with the record movement of gold $667 millions net to the United States. (f) Account for the fact that in spite of the tre-

mendous shipments of gold to the United States, Spain, Japan and the Argentine, the gold reserves of England, France, and Germany were greater in 1925 than in 1913. (g) What theories are common as to the destiny of the American gold hoard?

422. International Balance of Payments

The growing interest in and the importance of our foreign trade and finance have led different organizations to make a study of the items entering into the so-called international balance sheet and of the relative importance of these different factors. The Finance and Investment Division of the Bureau of Foreign and Domestic Commerce has made studies running back to 1919. These studies form the most complete set of statistics for a study of international trade and its financing. The table on the next page shows the Bureau's estimates of the annual balances for each year 1919 to 1925, inclusive.

(a) How do you account for the decrease in exports of merchandise from 1919 to 1923? What factors entered into the situation in 1924 to bring about such a large increase over 1923? (b) What has been the relation of the total visible and invisible credits to total visible and invisible debits? Have the differences been offset by exportation of American capital (or the importation of foreign securities)? (c) What has been the trend according to this table for the following items: (1) gold movements; (2) sale of foreign securities in the United States; (3) foreign loans paid off; (4) merchandise imports and exports. (d) Is there any propriety in saying that American tourists consume on European soil the excess of merchandise exports of the United States? (e) Why are immigrant remittances declining? (f) Why are tourists' expenditures increasing? (g) If our average merchandise export balance is to be maintained, ought it to be paid in gold, goods, securities, or services?

Balance of International Payments, 1919–25

($000,000 omitted)

Items	1919	1920	1921	1922	1923	1924	1925
Credits							
Current items, visible:							
Exports of merchandise (net)	4,016	2,950	1,976	734	388	970	666
Exports of silver (net)	152	26	.....	.....	.....	36	34
Exports of gold (net)	160	.....	.....	.....	.....	.....	134
Exports of United States currency (net)	91	103	.....	.....	50	.....	.....
Current items, invisible:							
Interest on foreign investments (net)	50	50	80	[1] 351	[1] 417	[1] 464	515
Ocean freight payments (net)	93	93	33	7	.....	8	.....
Total	4,562	3,222	2,089	1,092	855	1,478	1,350
Capital items:							
Foreign loans paid off	515	571	255	78	23	45	140
Sales of securities to foreigners	.....	.....	48	216	412	319	411
Principal of debts to United States Government	.....	.....	.....	31	91	23	27
Total	515	571	303	325	526	387	578
Total credits	5,077	3,793	2,392	1,417	1,382	1,865	1,927
Debits							
Current items, visible:							
Imports of silver (net)	.....	.....	11	8	2	.....	.....
Imports of gold (net)	.....	50	667	238	294	258	.....
Imports of United States currency (net)	.....	.....	100	.....	.....	50	62
Current items, invisible:							
Governmental expenditures abroad	2,375	305	50	16	19	5	5
Ocean freight payments (net)	.....	.....	.....	.....	8	.....	8
Immigrants' remittances (net) and charity	600	700	500	400	360	355	360
Tourists' expenditures (net)	50	150	200	300	400	500	560
Total	3,025	1,205	1,528	962	1,083	1,168	995
Capital items:							
New foreign bond issues in the United States	436	506	665	637	363	795	920
Other foreign investments of American capital	534	939	427	[2] 326	[2] 54	[2] 114	90
Total	970	1,445	1,092	963	417	909	1,010
Total debits	3,995	2,650	2,620	1,925	1,500	2,077	2,005
Excess of credits (+) or debits (−) on current transactions	+1,537	+2,017	+561	+130	−228	+310	+354
Excess of credits or debits on capital transactions	−455	−874	−789	−638	+109	−522	−432
Excess of credits or debits on all transactions of the year	+1,082	+1,143	−228	−508	−119	−212	−78
Net change in foreigners' bank deposits and book accounts as revealed by questionnaires	.....	.....	.....	+375	+3	+216	−61
Balance representing errors and omissions	.....	.....	.....	−133	−116	+4	−139

[1] Includes interest received by United States Government from foreign governments.
[2] Securities only.

423. International Long-Term Loans and the Trade Balance

In Moody's find descriptions of the leading foreign bonds dealt in on the New York market.

(a) Compare the security of these respective loans: (1) What different methods of giving security are illustrated? (2) Contrast the security given in case of governments, cities, and corporations. (3) Contrast the security given in case of old established governments and of new, undeveloped, or unstable political, regions. (4) What is the "cumulative sinking fund" arrangement?

(b) Compare the maturities of the respective loans: (1) The French loans have no fixed maturities: is this characteristic of government loans in France? (2) One Japanese loan is redeemable at par at any time: what effect does this have on its market value? (3) What was the purpose of the conversion privilege of the French loan of 1917? of the British loan of 1929?

(c) Compare these loans with respect to payment of principal and interest: (1) What importance attaches to whether the interest and principal are payable in New York? are payable in dollars? (2) What differences are noted as to degree of tax exemption? How do these affect the market value of the security?

(d) Consider the relation of these loans to exchange rates: (1) At the time the loan was issued in the United States what effect did it have on the rate of exchange in New York on the borrowing country? (2) What effect does each payment of principal or interest have on this exchange rate? (3) When the rate of exchange rose in New York on London what effect did it have on the New York price of the British loan of 1929? How did the movement of exchange rates affect the conversion privilege?

(e) Consider the relation of these loans to foreign trade balances: (1) If the United States had a continued favorable balance of trade with New Zealand, how would it facilitate loaning to New Zealand, the latter offering government bonds for sale in New York? (2) If the net balance of trade between the United States and Chile were about zero, and Chile should float a government loan in New York, would this induce a change in our foreign trade so as to give us a favorable balance of trade with Chile? (3) If the balance of trade of the United States with the rest of the world runs in the vicinity of $500,000,000 annually, does it mean that we are loaning this balance to the rest of the world? (4) If in the loan to the City of Soissons of 1936 our State Department had required that Soissons expend the proceeds of the loan in the United States, would it have affected favorably our balance of trade? If such provision were required in all our loans abroad, would the combined effect be to increase our

favorable trade balance? Why should Soissons or other borrowers object to such provisions? Is such a "tying clause" a wise provision economically speaking? (5) When payments of principal and interest are made in the future, what effect will they have on the rate of exchange in New York on the paying countries? Is it possible for a borrowing country to make payments of principal and interest unless she has a favorable balance of trade with the payee country? with the world as a whole? (6) Corporations sometimes fund their floating debt. In case the United States have been enjoying for some time, months or years, a favorable balance of trade with respect to one country, or all countries combined, is this current floating indebtedness ever funded into permanent loans abroad? How?

424. Economic Effects of Foreign Loans

I would like to emphasize, in this connection, what to me is a most suggestive feature of this international situation. We are, I repeat, under constraint by our interests to allow both principal and accruing interest to remain in the debtor countries. Think of just what that means: it means that this capital, instead of being passed over to us, will remain in use in these debtor countries. It will be used to finance their business, to enlarge their industries and give employment to their people. It will contribute to the strength of their banks, it will build up their foreign trade, and if we want to take the narrow view of it, we may say that this capital of ours in their hands will help to strengthen them as competitors of ours in world affairs. And yet it will be to our advantage to do it. We will suffer if we fail to do it. In order to serve our own interests we must serve the common interests, and that principle holds throughout the business world. That Europe shall not pay her debts to us under present conditions is fixed in the very constitution of things, in the framework of economic relations. I doubt if she ever does pay in the sense of sending goods or gold to this country. Not if we remain a creditor nation. We will have interests over there, we will have paper certificates of obligation or perhaps of ownership in properties over there; but if we continue to take interest or dividends in the form of new certificates we will withdraw nothing. A creditor nation, increasing in wealth, is always adding to the holdings of its tin boxes. What difference does it make to the debtor nations so long as they have all the property and all the increment from the property? Generations may come and go, enjoying a constantly increasing stream of products from these properties, and never knowing that they are in debt. So little do certificates of ownership really count in the distribution of consumable wealth.

To illustrate—let us suppose a case within our own country. Let us suppose that a resident of New York makes an investment in Montana. Montana is not a foreign country, but it is as far away as a foreign country, and economic laws are the same everywhere. We will suppose a resident of New York makes an investment in Montana, in a mining or manufacturing enterprise. The business is successful, but as the owner has all the income he requires for personal expenditures from other sources, he draws nothing from it. All the profits are retained in the business for development purposes. The plant is enlarged; the product

is increased. The product has a ready market; it meets a common need; the public is served by the increased production. The payroll grows larger; a town grows up about the works; it grows into a city, with stores, schools, churches, libraries, theatres, street railways, and all the facilities, equipment and convenience of city life. It is a prosperous, progressive community. Finally, the owner dies, never having drawn a dollar from the Montana property. Query: who has had the benefits of the investment in Montana? You may say that somebody will inherit the property, but that does not alter the principle that so long as the increment is reinvested productively the benefits are running to the public and not to the owner.

An instance quite similar in some respects to this supposed case developed the other day when Capt. Joseph Delamar, whose wealth was largely in western mines, died and left $10,000,000 worth of securities to the endowment funds of Columbia, Harvard and Johns Hopkins universities. That case is closed with the accumulations definitely dedicated to the public.

(a) Criticize the above argument from (1) the national point of view; (2) the international point of view; and (3) the point of view of different classes inside the United States. (b) Is it true that if country A loans to country B for developmental purposes, then country A will benefit from the development of industry in B? May not the benefits accrue more largely to countries C, D and E? Does a country benefit in proportion to the amount of loans it contributes to the borrowings of the debtor country? Does a tying clause assure such proportional benefit? (c) If Europe never pays her War debt to the United States, in whole or part, what is the permanent sacrifice of the United States people? (d) Do developmental loans usually procure the goodwill of the borrower for the lender? Do they make for international peace and goodwill? (e) Professor Keynes, in 1925, said: "to lend vast sums abroad for long periods of time without any possibility of legal redress, if things go wrong, is a crazy construction, especially in return for a trifling extra interest." What other advantages besides interest are sought in international loans? (f) If by loans financial assistance is given to foreign enterprises and competition with home industries is stimulated, is not home industry sacrificed on the altar of finance for the benefit of foreign interests? (g) Does the higher yield on foreign investments more than compensate for the greater risk of foreign over domestic investments?

425. Control of International Investment Banking

Present control of international investment banking includes: (1) Restriction of foreign borrowing by citizens of the borrowing country itself. (2) Restriction of borrowing by foreigners from citizens of the lending country itself. (3) Guaranteeing of given bond issues by other countries, singly or jointly. (4) Assumption of oversight over

finances of borrowing country, in order to prevent it from borrowing too extensively or from quarters which are deemed dangerous.

(a) Give current or recent examples of each type of international control.

426. The Mexican Constitution of 1917

Résumé of Article 27: The ownership of all minerals, including oil, is vested in the nation—a provision designed to keep the control of such resources out of the hands of foreigners. In granting such concessions to develop resources, the government should favor Mexicans over foreigners; monopolies are prohibited; and foreign concessionaires are not exempt from taxation. Moreover, all contracts and concessions made by former Mexican governments after 1876 "which shall have resulted in the monopoly of lands, waters, and natural resources of the nation by a single individual or corporation, are declared subject to revision, and the Executive is authorized to declare those null and void which seriously prejudice the public interest." By virtue of this clause foreign properties were offered for sale by the government.

Statement, by Department of State, of the United States, June 8, 1921: "Mexico is free to adopt any policy which she pleases with respect to her public lands, but she is not free to destroy without compensation valid titles which have been obtained by American citizens under Mexican laws." The United States protested against certain taxes on oil properties which were declared to be confiscatory.

Another statement of the Department of State: "When a nation has invited intercourse with other nations, has established laws under which investments have been lawfully made, contracts entered into, and property rights acquired by citizens of other jurisdictions, it is an essential condition of international intercourse that international obligations shall be met and that there shall be no resort to confiscation and repudiation."

(a) Is the position of the State Department defensible? (b) If an international bankruptcy court existed, the creditors would have to prove their claims: is it likely that the contracts in the above acquisitions of property were as sanctified when they were first entered into as they have become with the passage of time? (c) Should a country come to the support of its citizens in disputes over capital invested abroad? even if human life must be sacrificed for the propertied interests? (d) What is the "Calvo clause" demanded by certain South American countries? (e) What are the functions of the Association for the Protection of American Interests in Mexico?

427. Supervision of Foreign Loans by the Department of State

Statement issued in 1922:

At a conference held last summer between the President, certain members of the cabinet and a number of investment bankers, the interest of the government in the public flotation of issues of foreign bonds in the American market was informally discussed, and the desire of the Government to be duly and adequately informed regarding such transactions before their consummation, so that it might express itself regarding them if that should be requested, or seem desirable, was freely explained. Subsequently the President was informed by the bankers that they and their associates were in harmony with the Government's wishes and would act accordingly. . . . The flotation of foreign bond issues in the American market is assuming an increasing importance and on account of the bearing of such operations upon the proper conduct of affairs, it is hoped that American concerns that contemplate making foreign loans will inform the State Department in due time of the essential facts and subsequent developments of importance. . . . Responsible American bankers will be competent to determine what information they should furnish and when it should be supplied. . . . The Department of State cannot of course require American bankers to consult it. . . . The Department believes that in view of the possible national interests involved it should have the opportunity of saying to the underwriters concerned, should it appear advisable to do so, that there is or there is not objection to any particular issue.

(a) Suggest a type of loan which the State Department would hesitate to approve. (b) Is it reasonable that if the bankers wish support later in case of default of the borrower that the State Department should have the right to approve or disapprove the loan at the time it is made? (c) What objection to the indicated type of supervision could the bankers offer? (d) Should the Department of State make public the terms of the loans thus submitted to it? Should Congress be asked to approve the loans too?

428. Policy of Supporting Foreign Investments

Whether a government should intervene for the purpose of collecting debts or protecting the property of its nationals is a matter for each government to determine for itself. British policy, stated by Lord Palmerston, 1848: That capitalists should not consider intervention as a matter of international law but entirely as a "question of discretion." American policy, Department of State, July 1923: That the Government was not bound to defend the validity of concessions, "but that it would deal with questions affecting nationals as they arise, as international courtesy, equity and justice justify."

(a) Argue the wisdom of the policies here expressed.

429. Methods by Which a Government Supports Its Nationals in International Property Claims

When the government of a creditor country believes that its nationals have been wronged by other countries, and diplomacy fails to effect a settlement, it may resort to any of the following policies:

1. Refuse to recognize the new government until they admit such obligation, or if it is an old government, break diplomatic relations until they admit the obligation.
2. Intervene temporarily, using military force for police purposes.
3. Assume financial control, alone or in conjunction with other governments, until the obligation is liquidated.
4. Establish a protectorate or annex the debtor country.

(a) How does non-recognition avail? What is the present relation of the United States and the Union of Socialist Soviet Republics (Russia)? (b) Give examples when the United States has intervened in Central or South America. What are the Drago and Calvo doctrines? What was done in the Hague Conference of 1907 with these doctrines? (c) Why does the United States have financial control over more countries than any other country? What is her present relation to the finances of Cuba, Haiti, Santo Domingo, Nicaragua, Bolivia, Salvador? What American financial experts have recently advised various countries of the world as to their finances? (d) Interpret the Dawes Plan in the light of the fourfold classification given above.

430. Associations of Bondholders

Look up the publications of the following associations and determine the nature of their various activities and achievements: (a) Association Nationale des Porteurs Français de Valeurs Mobilières. 5 Rue Gaillon, 5. Paris. (b) Council of the Corporation of Foreign Bondholders. Council House, No. 17, Moorgate, London.

431. Flight of Capital and the Nature of a Loan

SAYS EUROPE'S CAPITAL INVESTED HERE

Referring to the investments in American securities by Europeans who found their own currencies impaired, he [Mr. Leffingwell] said:

"The flight from the paper currencies, however much we may deplore it, must, to some extent, have resulted in the creation of the relation of debtor and creditor as between the country to which and the country from which the flight took place. To that extent the unstable money countries must have become investors of capital in the stable money countries, including the United States. If there is a flight of capital from anywhere, there is a flight of capital to somewhere.

"To the extent that capital has flown from the paper money countries of Europe to the United States of America, it counterbalances our direct loans to Europe.

"Though I cannot hazard an estimate of the amount of these balances, I suppose that they greatly exceed, in the more important instances, the amount of the loans floated in our markets since the war.

"This invisible capital of Europe is important because a doubt has been expressed whether Europe would be able to bear the burden of indebtedness being created in consequence of the loans which have been floated by European Governments, municipalities and companies in the United States during recent years—whether European countries would be able to find the foreign exchange, to make transfers. But do we know what is the position of the international capital account as between Europe and America, what is the residue of Europe's investment in America made before the war and not disposed of, what is the amount of capital which has flowed from Europe to America since the war, what is the amount of European investments in high-grade American securities being made every year, even in the case of stable money countries?

EUROPE'S INVESTMENTS OFFSET BORROWINGS

"If we add Europe's pre-war investments in America, or what is left of them, to Europe's investments consequent upon the flight of capital from the unstable money countries, and Europe's investments in America consequent upon the normal appetite of Europe's stable money countries for speculative investments, higher yields, or a diversification of risk, what total shall we get?

"May it not go a long way to neutralize the more conspicuous flow of capital from America to Europe in the form of European public issues floated here?"—[R. C. Leffingwell, before Investment Bankers' Association of America, 1926.]

(a) In what forms does capital "take flight" from an inflated currency country? (b) How large has been the total amount of loans made to Europe since the war? (c) Why is it difficult to estimate the amount of capital which has "taken flight" to the United States from Europe during this time? (d) Is the capital which has "taken flight" to us likely to flow back again to Europe, and if so, in what forms?

432. International Movement of Gold Reserves

There is a tendency in some quarters to discredit the statement that Germany was compelled to part with gold in order to pay for imports from Holland and Scandinavia, but facts which have come to light go to prove that she certainly did export gold. Of the War indemnity exacted from France in 1872, £6,000,000 was allocated for the special war chest to be kept in the Julius Tower at Spandau. This reserve was known to consist of a large proportion of British sovereigns, and during the first week in March, 1915, a considerable number of these coins found their way back to London via Scandinavia. The sovereigns were those bearing the Victoria effigy and "Shield" reverse, of which a large number was minted during the years 1838 to 1874. Consequently, when the

bankers in London, to whom the gold from Scandinavia was consigned, found it to consist of many new sovereigns bearing the date 1872, it was at once apparent whence the shipment had originated. Further evidence of their having been taken from Germany's war chest was found in the fact that some of the coins were actually received in the identical bags and boxes in which they had been packed when leaving the Bank of England forty-three years previously, and no little surprise was evidenced in banking circles when it became known that no effort had been made to conceal the place of origin by removal of the old Bank of England labels.

The heavy increases registered in the gold reserve of the Netherlands' Bank from time to time during the war, may also be taken as indisputable evidence that Germany was forced to export gold to Holland in support of exchange and to pay for supplies.—[Wm. F. Spalding, Foreign Exchange and Foreign Bills, 1919, pp. 105-106, Isaac Pitman & Sons, New York, by permission.]

(a) What would have been the value of these gold reserves to Germany if they had never been used? (b) Why was it profitable to Germany to use them during the recent war? (c) What influence did the pouring of these gold reserves into the Netherlands have upon banking and prices at the time in Germany? in the Netherlands? (d) What is the primary purpose of a bank reserve?

433. War and the Movement of Capital

When the London investment market closed down, the most important part of the export of British capital abruptly ceased. Nor was investment abroad allowed to revive during the war. New Capital issues were controlled, and every effort was made to direct all the country's available savings to the war loans. This was just such a diminished export of capital as was referred to above and was by itself bound to make the exchanges highly favourable, and to bring in large imports of gold.

The financing of international trade was disorganised by the crisis of July. The obligations of foreign clients to British accepting houses amounted to a very large sum. Several millions were falling due every day, but under normal conditions were set off in the market against new business. When this business was suddenly suspended and had, as it were, to be wound up, the means of paying these liabilities had to be found. It was the consequent pressure to buy sterling that choked up the foreign exchange market. When the various emergency measures taken by the British Government in August and September 1914, restarted the machinery of accepting, discounting and remittance, and the exchange market began to show signs of life again, a part of the debts due to the accepting houses began to be paid. Payment was delayed in some cases by moratoria abroad, in others by the prohibitions against trading with the enemy, in others by the embarrassments of the debtors. The restarting of business of itself renewed the lending by London, but the net effect of the crisis was that a substantial part of the British capital embarked in the financing of international trade had been called up, and more was to be gathered in later on.—[R. G. Hawtrey, Currency and Credit, sec. ed.,

London, 1923, p. 218, Longmans, Green and Co., New York, by permission.]

(a) What is a moratorium? (b) What emergency measures did the British Government take in 1914 to meet the situation growing out of the war? (c) Explain "a diminished export of capital . . . make the exchanges highly favorable, and to bring in large imports of gold." (d) Why did the Bank of England in 1914 guarantee the liabilities of the acceptance houses in London?

434. Foreign Investments and the Exportation of Private Capital

Statistics covering the exportation and importation of foreign securities are not complete. The Guaranty Trust Company of New York and the Federal Reserve Board have published the most satisfactory data in this regard. The total amount of new capital invested in foreign securities offered for sale in the United States (both new capital and refunding) for the years 1919 to 1923 is given in the table on the following page.

At this stage the student should read Chapters 1 and 2 in Dunn's American Foreign Investments, and Trade Information Bulletin Nos. 215 and 340 issued by the Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce, Washington, D. C., and Fisk, Inter-Ally Debt, Chapter 21, pp. 305-16.

(a) Trace the changes in the sale of foreign securities in this country during this period. Has there been a gradual increase in the volume of these securities offered each year? (b) What countries have been the largest and most consistent borrowers? (c) Does your reading and study of this flow of capital lead you to believe that the United States is supplanting or has supplanted Great Britain as the leading creditor nation? (d) How has the sale of these foreign securities in the United States influenced commercial banking in carrying on their work? (e) How does the sale of these securities affect the exchange rate at the time of sale? In the long run what will be the result?

Table for Problem 434

SUMMARY OF THE PRINCIPAL FOREIGN SECURITIES OFFERED FOR PUBLIC SUBSCRIPTION IN THE UNITED STATES

[Calendar years] ($000 omitted)

	1923			1922			1921			1920			1919		
	New Capital	Re-funding	Total	New Capital	Re-funding	Total	New Capital	Re-funding	Total	New Capital	Re-funding	Total	New Capital	Re-funding	Total
Government:															
Europe	70,000	5,000	75,000	131,725	5,000	136,725	138,270	63,800	202,070	177,300	100,000	277,300	70,000	302,681	372,681
Far East	50,000	.....	50,000	110,758	.....	110,758	12,000	.....	12,000	.....	.....	.....	.....	5,500	5,500
Latin America	67,500	50,000	117,500	148,275	19,000	167,275	188,253	.....	188,253	.....	.....	.....	15,050	4,956	20,000
North America	26,308	23,100	49,408	105,000	107,000	212,000	75,982	.....	75,982	84,413	14,896	99,309	86,378	80,000	166,378
Total	213,808	78,100	291,908	495,758	131,000	626,758	414,505	63,800	478,305	261,713	114,896	376,609	171,428	393,131	564,559
United States noncontiguous territory	8,186	.....	8,186	50,373	.....	50,373	27,145	.....	27,145	16,277	.....	16,277	11,700	.....	11,700
Corporate:															
Europe	18,500	.....	18,500	97,270	.....	97,270	3,275	.....	3,275	15,675	.....	15,675	19,113	.....	19,113
Far East	19,900	.....	19,900	1,250	1,250	2,500	.....	.....	.....	5,922	.....	5,922	1,949	.....	1,949
Latin America	17,317	.....	17,317	57,300	8,621	65,921	53,367	6,600	59,967	52,687	6,100	58,787	31,359	13,379	44,738
North America	34,096	8,310	42,406	48,006	6,380	54,386	104,875	1,750	106,625	96,427	51,815	148,242	32,661	6,987	39,648
Total	89,813	8,310	98,123	203,826	16,251	220,077	161,517	8,350	169,867	170,711	57,915	228,626	85,082	20,366	105,448
Summary:															
Government	213,808	78,100	291,908	495,758	131,000	626,758	414,505	63,800	478,305	261,713	114,896	376,609	71,428	393,131	564,559
United States noncontiguous territory	8,186	.....	8,186	50,373	.....	50,373	27,145	.....	27,145	16,277	.....	16,277	11,700	.....	11,700
Corporate	89,813	8,310	98,123	203,826	16,251	220,077	161,517	8,350	169,867	170,711	57,915	228,626	85,082	20,366	105,448
Grand total	311,807	86,410	398,217	749,957	147,251	897,208	603,167	72,150	675,317	448,701	172,811	621,512	268,210	413,497	681,707

[Federal Reserve Bulletin, February 1924, pp. 92-3.]

435. Foreign Loans Placed in the United States

The United States had been for many decades prior to 1914 regarded as a debtor nation. Large amounts of funds had been imported into this country during the 19th century and first decade of the 20th for the purpose of building railroads and for the development of our vast stores of natural resources. Following the outbreak of the World War in 1914, American securities which were held abroad began to be returned to this country. The large demand placed upon the warring countries for supplies and funds to carry on and finance the war led them to seek both loans and supplies in this country. The Allies were in a much more favorable situation to obtain these things from the United States. In order to pay for the large quantities of war material purchased here, American securities held abroad were sold in the New York market and in addition advances were obtained from bankers in New York. The effect of this method of financing was a reduction of our debt abroad and an increase in the holdings of foreign securities by our banks and investors. As a result of the policy of the Allies in financing the war, we became more and more a creditor nation. The bankers and investors absorbed these loans until the United States entered the war in 1917, after which our government took over the burden. Tables I and II show the total loans made by the United States Government to foreign countries under authority of the four acts specified, and payments thereon to November 15, 1925.

TABLE I. TOTAL LOANS MADE BY U. S. GOVERNMENT TO HER ALLIES UNDER AUTHORITY OF LIBERTY LOAN ACTS

(000 omitted)

Country	Loan Made Prior to Nov. 11, 1918	Loans Advanced After Nov. 10, 1918	Repayments Prior to Refunding	Net Amount Advanced
	$	$	$	$
Belgium	171,780	177,434	2,003 [2]	347,211
Cuba	10,000	.....	10,000 [1]	.....
Czechoslovakia	.....	61,974	.....	61,974
France	1,970,000	1,027,478	64,303 [2]	2,933,175
Great Britain	3,696,000	581,000	202,182 [2]	4,074,818
Greece	.....	15,000	.....	15,000
Italy	1,031,000	617,034	165 [2]	1,647,869
Liberia	.....	26	.....	26
Roumania	.....	25,000	1,794 [2]	23,206
Russia	187,730	.....	.....	187,730
Serbia [3]	10,605	16,175	721 [2]	26,060

Source—Reports of the Secretary of the Treasury.
[1] 1925, p. 49. [2] 1923, p. 231; also 1925, p. 49. [3] Later referred to as Yugoslavia.

TABLE II. NET OBLIGATIONS UNDER AUTHORITY LIBERTY LOAN ACTS HELD BY U. S. TREASURY AND OTHER ADVANCES AND REPAYMENTS BY THE U. S. GOVERNMENT

(000 omitted)

Country	Total Net Obligations Held under Authority of Liberty Loan Acts (in 1925)	Total Advances and Repayments through Sale of Surplus War Supplies under Act July 9, 1918		Total Advances and Repayments for Relief Supplies under Acts Feb. 25, 1919, and March 30, 1920		Total Net Principal of Obligations Received by Treasury Pursuant to Four Acts Mentioned
		Advances	Repayments	Advances	Repayments	
	$	$	$	$	$	$
Armenia	.....	.....	.....	11,960	.....	11,960
Austria	.....	.....	.....	24,006	.....	24,056
Belgium	347,211	29,873	54	.....	.....	377,030
Cuba	10,000 [1]	.....	.....	.....	.....	.....
Czechoslovakia	61,974	20,604	.....	9,301	.....	91,880
Esthonia	.....	12,213 [2]	.....	1,786	.....	13,999
Finland	.....	.....	.....	8,282	.....	8,282
France	2,933,175	407,341	.....	.....	.....	3,340,516
Great Britain	4,074,818	.....	.....	.....	.....	4,074,818
Greece	15,000	.....	.....	.....	.....	15,000
Hungary	.....	.....	.....	1,686	.....	1,686
Italy	1,647,869	.....	.....	.....	.....	1,647,869
Latvia	.....	2,522	.....	2,610	.....	5,132
Liberia	26	.....	.....	.....	.....	26
Lithuania	.....	4,159	.....	822	.....	4,982
Nicaragua	.....	167	83	.....	.....	84
Poland	.....	83,683	.....	75,984	.....	159,667
Roumania	23,206	12,923	.....	.....	.....	36,128
Russia	187,730	406	.....	4,465	.....	192,601
Yugoslavia	26,060	24,978	.....	.....	.....	51,038

Source—Reports of the Secretary of the Treasury.
[1] Cuba has paid her loan in full.
[2] Credit of $1,932,923.45 allowed on account of cargo on sunk ship.

Post-war methods of handling the loans made by the U. S. Government to the Allies: Table III shows the total net amounts of the principal advanced under authority of the Liberty Loan Acts and the other three acts already referred to. It further shows the total amount of interest accrued on all unfunded debts as of November 15, 1925, paid or unpaid, and the countries which have refunded their debts and the amounts thereof.

(a) From a study of these tables, determine what per cent of the total amount advanced under authority of Liberty Loan Acts was advanced prior to the Armistice and the per cent advanced after the Armistice. (b) Would it not have been a wise measure for the U. S. Government to have stopped all loans after November 11, 1918? (c) What is the net amount of the principal advanced under the three Acts of July 9, 1918, February 25, 1919, and March 30, 1920? On what basis was the U. S. Government justified in extending these loans long after the war had ceased? (d) What countries have refunded their indebtedness? (e) By a careful study of the refunding agreements,

TABLE III. NET PRINCIPAL OF OBLIGATIONS HELD BY U. S. TREASURY, INTEREST ACCRUALS AND PAYMENTS, AMOUNTS WHICH HAVE BEEN REFUNDED

(000 omitted)

Country	Total Net Principal of Obligations Received by Treasury Pursuant to Four Acts[1]	Disposition of Interest Accrued on All Obligations Received by Treasury Pursuant to the Four Acts[1] to November 15, 1925, or at Date of Refunding*			Amount of Total Debt at Time of Refunding	
		Total Accrued[2]	Total Paid[2]	Unpaid Balance[2]	Date of Agreement	Amount
	$	$	$	$		$
Armenia	11,960	3,499	.....	3,499	.....	.....
Austria	24,056	7,217	.....	7,217	.....	.....
Belgium	377,030	59,487	18,736	40,750[3]	Aug. 18, 1925	417,780
Cuba	10,000	1,287	2,287	.....	.....	Paid in full
Ezechoslovakia	91,880	23,427	304[4]	23,120[3]	Oct. 13, 1925	115,000
Csthonia	13,999	1,764	1	1,764[3]	Oct. 28, 1925	13,830
Finland	8,282	982	982	718[3]	May 1, 1923	9,000
France	3,340,516	1,195,066	231,570	963,496	.....	.....
Great Britain	4,074,818	701,517	701,517	525,182[3]	June 19, 1923	4,600,000
Greece	15,000	4,159	1,159	3,000	.....	.....
Hungary	1,686	298	45	253[3]	Apr. 25, 1924	1,939
Italy	1,647,869	451,730	57,599	394,131[3]	Nov. 14, 1925	2,042,000
Latvia	5,132	774	131	643[3]	Sept. 24, 1925	5,775
Liberia	26	8	1	7	.....	.....
Lithuania	4,982	1,186	137	1,048[3]	Sept. 22, 1924	6,030
Nicaragua	84	15	15	.....	.....	.....
Poland	159,667	21,441	2,548	18,893[3]	Nov. 24, 1924	178,560
Roumania	36,128	11,547	263	11,283	.....	.....
Russia	192,601	76,320	7,930	68,390	.....	.....
Yugoslavia	51,038	16,289	636	15,653	.....	.....

* Source—Report Secretary Treasury, 1925, pp. 48–67; 265–267.
[1] Liberty Loan Acts: Act of July 9, 1918; Act of Feb. 25, 1919; and of March 30, 1920.
[2] See dates when agreements for refunding were made with certain countries.
[3] Became part of principal of funded debt. See Report 1925, p. 49.
[4] Includes certain open account claims.

set forth briefly what are the outstanding features of the agreement between the United States and Great Britain. Does it differ essentially from the agreements made with the smaller and financially weaker countries? (f) To what extent have the countries which have refunded their obligations carried out the payments agreed upon?

436. Basic Conception of Reconstruction Behind Dawes' Plan

1. Currency stabilization throughout Europe, including an effective gold-exchange standard.

2. Reduction of European trade-barriers, as urged in the Bankers' Manifesto, or at least a stabilization of these restrictions for a period sufficient to allow European trade to adjust itself to them.

3. Capitalization of the entire German reparation liability, probably by means of a marketable bond issue with existing Dawes assets as security. As these bonds would have a capital as well as an interest value, annual payments would be considerably less than under the present plan. War-debt revision would necessarily be a concomitant feature.—[Whalley-Eaton Service, December 7, 1926.]

(a) These three are given as the steps in the reconstruction process: what was done to accomplish currency stabilization? (b)

What was the "Bankers' Manifesto"? What was its general content? Who signed it? Did it have any relation to the Inter-Allied Debt Settlements? to the United States tariff policy? (c) Explain "capitalization of the entire German reparation liability." If Americans buy these bonds will they be paying the reparations for Germany? Explain "capital as well as interest value."

437. The Effect of the Re-establishment of Stable Currencies in Europe

NEW ERA: European economists agree that a new era is very near.

1. Only a few additional stabilization loans will be required. One object of stabilization, which presupposes balanced budgets, is the elimination of any necessity for the stabilizing countries to raise new credits abroad.

2. The need of private European industry for American loans may be expected to grow less and less. In every country where stabilization has taken place ancient habits of thrift have rapidly come back into vogue. Germany, for instance, has been creating new domestic capital.

3. Considerable parts of American loans abroad are represented by expatriated capital. No exact estimates are available, but at the time of the Dawes Report the McKenna Committee estimated that Germany's holdings abroad were in total not less than $1,600,000,000. Expatriated capital is tending to move back home.

4. The termination of the borrowing phase means the return of Europe to self-support. This development must profoundly affect trade currents. It will deprive America of certain differentials favorable to her trade. On the other hand, a normal Europe will be a better buyer of American raw materials.—[Whalley-Eaton Service, December 7, 1926.]

(a) What is a stabilization loan? What ones have been floated in the United States for the stabilization of Europe since the war? Was each effective? (b) The periods of rapid inflation during and since the war had what effect on habits of thrift in Europe? Is thrift an especial virtue in times of falling prices? (c) What is meant by "expatriated capital"? When was it expatriated? How was it expatriated? What effect did the expatriation process have on foreign exchange rates? What effect does "repatriation" have on exchange rates? (d) "Adding the interest America as a debtor nation used to pay abroad annually before the war to the not less than $600,000,000 she now receives as interest, exclusive of war debts, the United States is at least one billion annually to the good." Does the United States receive this net interest item in gold, or goods, or securities? If Europe ceases to need our net interest money for investment, what will happen? (e) The tendency has been for American investments in Europe in part to be in common stocks and ownership of properties: as stabilization progresses and the return to normalcy is effected, the earnings will probably increase: what will be done with these profits?

438. Statement of Agent-General for Reparation Payments

OFFICE OF THE AGENT-GENERAL FOR REPARATION PAYMENTS, STATEMENT OF RECEIPTS AND PAYMENTS FOR THE THIRD ANNUITY YEAR TO OCT. 31, 1926

(On cash basis, reduced to gold mark equivalents)

(ooo omitted)

	Month of October 1926 Gold Marks	Third Annuity Year—Cumulative Total to Oct. 31, 1926 Gold Marks
A. Receipts in third annuity year—		
1. In completion of second annuity—		
(a) Transport tax	.....	8,095
(b) Interest on railway reparation bonds	.....	45,000
2. On account of third annuity—		
(a) Normal budgetary contribution	9,166	18,333
(b) Supplementary budgetary contribution	18,000	18,000
(c) Transport tax	22,500	45,000
(d) Interest on railway reparation bonds	45,000	45,000
3. Interest received	.....	176
	94,666	179,604
B. Balance of cash at Aug. 31, 1926		93,626
Total cash available		273,231
C. Payments in third annuity year—		
1. Payments to or for the account of—		
France	35,642	71,098
British Empire	19,905	34,994
Italy	8,494	13,582
Belgium	4,248	10,866
Serb-Croat-Slovene State	3,944	6,787
United States of America	3,339	14,261
Rumania	889	1,501
Japan	478	478
Portugal	441	583
Greece	183	330
Poland	5	5
Total payments to Powers*	77,574	154,491
2. For service of German external loan, 1924	7,702	13,851
3. For expenses of—		
Reparation Commission	299	583
Office for Reparation Payments	308	616
Inter-Allied Rhineland High Commission	262	524
Military Inter-Allied Commission of Control	200	500
4. Costs of arbitral bodies	.....	16
5. Discount on amounts received from Deutsche Reichsbahn Gesellschaft in advance of due date	1,089	1,089
6. Exchange differences	13	108
Total payments	87,451	171,784
D. Balance of cash at Oct. 31, 1926		101,447

* See Tables I and II for analysis of payments by category of expenditure and by Powers.

TABLE I. TOTAL PAYMENTS TO POWERS CLASSIFIED ACCORDING TO CATEGORY OF EXPENDITURE

(000 omitted)

	Month of October, 1926 Gold Marks	Third Annuity Year—Cumulative Total to Oct. 31, 1926 Gold Marks
1. Occupation costs.		
(a) Marks supplied to Armies of Occupation	4,011	6,719
(b) Furnishings to Armies under Arts. 8–12 of Rhineland Agreement	3.926	7.800
	7,938	14,519
2. Deliveries in kind.		
(a) Coal, coke and lignite	13,426	26,560
(b) Transport of coal, coke and lignite	4,610	7,360
(c) Dyestuffs and pharmaceutical products	1,438	2,485
(d) Chemical fertilizers and nitrogenous products	2,837	6,165
(e) Coal by-products	276	711
(f) Refractory earths	9	31
(g) Agricultural products	857	1,994
(h) Timber	2,824	5,332
(i) Sugar	.....	310
(j) Miscellaneous deliveries	17,037	33,894
	43,319	84,847
3. Deliveries under agreement	.....	10,031
4. Reparation recovery acts	22,873	40,167
5. Miscellaneous payments	98	252
6. Cash transfers.		
(a) Settlement of balances owing for deliveries made or services rendered by the German Government prior to Sept. 1, 1924	5	442
(b) In foreign currency	3,339	4,230
	3,344	4,672
Total payments to Powers	77,574	154,491

TABLE II. PAYMENTS TO EACH POWER CLASSIFIED ACCORDING TO CATEGORY OF EXPENDITURE

(000 omitted)

	Month of October, 1926 Gold Marks	Third Annuity Year—Cumulative Total to Oct. 31, 1926 Gold Marks
Payments to or for the account of:		
1. France—		
(a) Marks supplied to Army of Occupation	3,008	4,513
(b) Furnishings to Army under Arts. 8–12 of Rhineland Agreement	2,773	5,508
(c) Reparation Recovery Act	4,680	8,838
(d) Deliveries of coal, coke and lignite	8,262	18,249
(e) Transport of coal, coke and lignite	3,406	4,984
(f) Deliveries of dyestuffs and pharmaceutical products	258	585
(g) Deliveries of chemical fertilizers and nitrogenous products	2,454	5,782
(h) Deliveries of coal by-products	256	669
(i) Deliveries of refractory earths	9	31
(j) Deliveries of agricultural products	857	1,994
(k) Deliveries of timber	2,250	4,557
(l) Deliveries of sugar	.....	310
(m) Miscellaneous deliveries	7,350	14,635
(n) Miscellaneous payments	75	150
(o) Casn transfer: Settlement of balances owing for deliveries made or services rendered by the German Government prior to Sept. 1, 1924	.....	286
Total France	35,642	71,098
2. British Empire—		
(a) Marks supplied to Army of Occupation	1,002	2,205
(b) Furnishings to Army under Arts. 8–12 of Rhineland Agreement	708	1,408
(c) Reparation Recovery Act	18,193	31,329
(d) Miscellaneous payments	.....	15
(e) Cash transfer: Settlement of balances owing for deliveries made or services rendered by the German Government prior to Sept. 1, 1924	.....	35
Total British Empire	19,905	34,994
3. Italy—		
(a) Deliveries of coal and coke	5,160	7,408
(b) Transport of coal and coke	1,143	1,945
(c) Deliveries of dyestuffs and pharmaceutical products	529	1,070
(d) Miscellaneous deliveries	1,657	3,124
(e) Miscellaneous payments	4	33
Total Italy	8,494	13,582

4. Belgium—		
(a) Furnishings to Army under Arts. 8–12 of Rhineland Agreement	444	883
(b) Deliveries of coal, coke and lignite	3	902
(c) Transport of coal, coke and lignite	60	430
(d) Deliveries of dyestuffs and pharmaceutical products	649	813
(e) Deliveries of chemical fertilizers and nitrogenous products	383	383
(f) Deliveries of coal by-products	19	41
(g) Deliveries of timber	574	774
(h) Miscellaneous deliveries	2,112	6,509
(i) Miscellaneous payments	.....	10
(j) Cash transfer—Settlement of balances owing for deliveries made or services rendered by the German Government prior to Sept. 1, 1924	.....	115
Total Belgium	4,248	10,866
5. Serb-Croat-Slovene State—		
(a) Deliveries of pharmaceutical products	1	15
(b) Miscellaneous deliveries	3,924	6,733
(c) Miscellaneous payments	19	38
Total Serb-Croat-Slovene State	3,944	6,787
6. United States of America—		
(a) Deliveries under agreement	.....	10,031
(b) Cash transfers in foreign currency	3,339	4,230
Total United States of America	3,339	14,261
7. Rumania—		
(a) Miscellaneous deliveries	889	1,497
(b) Miscellaneous payments	.....	3
Total Rumania	889	1,501
8. Japan—Miscellaneous deliveries	478	478
9. Portugal—Miscellaneous deliveries	441	583
10. Greece—Miscellaneous deliveries	183	330
11. Poland—Cash transfer—Settlement of balances owing for deliveries made or services rendered by the German Government prior to Sept. 1, 1924	5	5
Grand total	77,574	154,491

NOTE.—Receipts—Item 2 (b)—Supplementary Budgetary Contribution: This is the first installment received pursuant to an agreement dated Sept. 8, 1926, with the Finance Minister of the Reich under which a fixed payment of 300 million gold marks payable during the third annuity year was substituted for a total contingent liability of 500 million gold marks payable in the fourth and fifth annuity years.

(a) Study this statement carefully, noting types of receipts, forms of payments, forms of payments to the respective countries, proportional distribution of payments among the countries. (b) Get a copy of the Dawes Plan and see that these payments conform to the Plan.

CHAPTER XVII

NON-COMMERCIAL BANKING

439. Savings Banks and Commercial Deposits

(a) If savings banks reserve the right to demand advance notice of withdrawal, need their assets be as liquid as otherwise? (b) Do savings banks use their privilege of delaying withdrawal? Why? (c) If they do not, and thereby tend to treat their deposits as demand deposits, should they be required to keep as high reserves as commercial banks? (d) How can savings banks, by watching the business cycle and exercising their privilege of delaying withdrawal, profit by buying securities from the commercial banks?

440. Organization of Mutual Savings Bank

The following announcement was made in the New York papers on November 4, 1923:

BROWNVILLE STARTS SAVINGS BANK

A certificate of incorporation of the Brownville Savings Bank, Brooklyn, was filed yesterday with County Clerk Kelly in Brooklyn. The bank will be located at 437 Rockaway Avenue. The Directors are Benjamin Bain, merchant; Moses Bernstein, insurance; A. Alexander Adelman, real estate; Charles Coell, real estate; and David Isacowitz, real estate.

(a) Outline the procedure according to the New York State Banking Law for organizing a savings bank. (b) Does the procedure differ materially from that governing the organization of other state banks? (c) How were the directors [trustees] listed in this announcement selected? How long do they hold office? (d) Compare the requirements of mutual savings banks regarding capital, surplus and dividends with the requirements for state banks for the same items.

441. Savings Department of a National Bank

(a) Since the National Bank Act or the Federal Reserve Act says nothing regarding the establishment of savings departments, and as the capital, deposits and all other funds of a national bank may be loaned or otherwise invested only in conformity with the provisions of the law, by what authority may such departments be established? (b)

What functions of a savings bank could be performed by a national bank? (c) Would state bank laws have a similar effect on handling savings funds that they have on the handling of trust funds by the national banks? What is your authority for such statement? (d) What effect have these departments in state and national banks had upon the methods of handling deposits by savings banks? (e) To what extent have national banks established savings departments? (f) In what class of securities or paper may such funds be invested by national banks? (g) What effect, if any, has this extension of banking by commercial banks had upon the structure of banking in this country?

442. Investing the Funds of a Savings Bank

CENTRAL SAVINGS BANK OF NEW YORK CITY

(January 1, 1926)

ASSETS

Bonds and Mortgages	$ 74,350,537.50
United States (Estimated Market Value)	16,049,221.50
State of New York (Estimated Market Value)	2,347,620.00
Other States (Estimated Market Value)	14,559,360.00
Cities in other States (Estimated Market Value)	15,464,309.50
Cities in this State (Estimated Market Value)	2,874,480.00
Railroad Mortgage Bonds (Estimated Market Value)	24,614,974.72
Promissory Notes	1,100,002.00
Banking Houses and Lots	1,125,000.00
Cash on Deposit in Banks or Trust Cos.	6,957,012.78
Cash on hand	1,031,511.79
Total of Collectible Interest	1,971,917.56
	$162,445,749.35

LIABILITIES

Amount due Depositors, viz.:	
Principal	$141,184,878.78
Dividends credited or to be credited for the three months ending with Dec. 31, 1925	1,372,361.92
Other Liabilities, viz.:	
Christmas Club Deposits	4,729.25
Surplus on Estimated Market Value	19,883,779.40
	$162,445,749.35
Surplus on Par Value	$ 21,789,511.68

(a) Compare the statement of this bank with the statement of the Kansas City National Bank (see Problem 196) regarding: (1) cash, (2) deposits, (3) loans and discounts, (4) surplus. (b) Should a mutual savings bank engage in the following practices: (1) Invest in stocks, liberty bonds, bonds of the American Telephone and Telegraph

Company? (2) Buy merchandise? (3) Buy and sell commercial paper? (4) Lend its funds directly in the New York call market? (5) Maintain a large surplus? large cash reserve? large bank balances in other banks? (c) Outline the general legal requirements regarding the securities in which mutual savings banks of New York may invest their funds. (d) Account for the wide difference in evaluation of surplus between $19,883,779.40 and $21,789,511.68.

443. The Corporate Trust Department

The Riverside Trust Company has just been organized with a capital and surplus of $7,500,000 (capital $5,000,000 and surplus $2,500,000). Among other departments this trust company has organized a corporate trust department and an individual trust department.

(a) Differentiate between the functions of these two departments. (b) Assume that you are the president of a large steel company. What would be the services which each of these departments could render you? (c) Suppose, secondly, that you have a large estate which you wish to donate to some college in such a form that you will be relieved of all responsibility and at the same time make it possible for the college to receive only the income from the gift. Outline the services which this trust company could render in carrying out the terms of this donation. (d) Which of the trust departments named would be more likely to handle the business suggested in (c)? Why?

444. The Trust Department of National Banks

The following statement appeared in the New York *Times* on December 11, 1923:

BANK STARTS TRUST DEPARTMENT

The National Bank of Commerce in New York announces the establishment of a trust department under the management of Second Vice President C. Alison Scully.

(a) Outline the procedure which was necessary in order for this bank to secure such privileges. (b) What in your opinion were the reasons why this bank found it advisable to establish such a department? (c) What are the principal functions which this bank can perform as a result of the establishment of this department? (d) When and by what authority was this action on the part of the National Bank of Commerce made possible? (e) Are perpetual charters necessary for national banks if they are to handle trust business.

445. Business of Trust Company—Corporation Activities: Redemption of Mortgage Bonds

NOTICE OF REDEMPTION

To Holders of First Mortgage Gold Bonds,
Series C, 6% of

WEST PENN POWER COMPANY

NOTICE IS HEREBY GIVEN, pursuant to the provisions of the Mortgage or Deed of Trust, dated March 1, 1916, executed by West Penn Power Company to The Equitable Trust Company of New York, as Trustee, that the undersigned intends to redeem on June 1, 1925, all its First Mortgage Gold Bonds, Series C, 6%, issued under the above-mentioned Mortgage or Deed of Trust.

You are therefore hereby notified that said Bonds will be redeemed and paid on June 1, 1924, at par and accrued interest, together with a premium of 6% upon the principal thereof (the redemption price specified in said Bonds) upon presentation of the Bonds in negotiable form, with all interest coupons maturing subsequent to June 1, 1925, attached thereto, at the principal office of The Equitable Trust Company of New York, Trustee as aforesaid. No. 37 Wall Street, New York City, New York, when and where such Bonds are required to be presented for redemption and payment.

From and after June 1, 1925, the above-mentioned Bonds will cease to bear interest and the coupons for interest maturing subsequent to that date will be void.

Coupons maturing June 1, 1925, may either be presented for payment with said Bonds, at the office of the Trustee, or may be detached and collected in the usual manner.

Dated, Pittsburgh, Pennsylvania, April 30, 1925.

WEST PENN POWER COMPANY

(a) What is a "mortgage or deed of trust"? (b) What is the function of the trust company as trustee in this type of transaction? (c) Does the trustee act as paying agent of the called bonds and of the due coupons and accrued interest?

446. Business of Trust Company—Corporation Activities: Depository for Bonds for Receivership

To the Holders of

Ten-Year Convertible Sinking Fund Six Per Cent Gold Bonds, and
Ten-Year Convertible Sinking Fund Seven and One-Half Per Cent Gold Bonds of Wilson & Co., Inc.:

Referring to the foregoing notice of the Receivers of Wilson & Co., Inc., the undersigned as the Committee constituted under a Deposit Agreement dated August 20, 1924, to represent holders of the above-mentioned bonds have approved and adopted a Plan and Agreement dated April 2, 1925, for the reorganization of Wilson & Co., Inc., and recommend its acceptance by holders of such bonds.

Holders of bonds now deposited under said Deposit Agreement or of

Bonds which shall be deposited thereunder on or before June 2, 1925, need not trouble to prove their claims on such bonds, inasmuch as the undersigned Committee will file or cause to be filed proofs of claim in accordance with the foregoing notice in respect of all such bonds so deposited on or before said date. Holders of such bonds not yet deposited are urged to deposit them promptly with one of the depositaries or agents of depositaries named below.

Dated, May 5, 1925.

Harold Stanley, Chairman,
John E. Blunt, Jr.,
Casimir I. Stralem,
Edward R. Tinker,
Melvin A. Traylor,
Elisha Walker,
Committee

T. Antell, Secretary,
140 Broadway,
New York City.

Depositaries

Guaranty Trust Company of New York
140 Broadway, New York City

The Chase National Bank of the City of New York
57 Broadway, New York City

Agents of Depositaries
First Trust and Savings Bank, Chicago, Ill.

Illinois-Merchants Trust Company, Chicago, Ill.

(a) Explain a "deposit agreement" in case of a receivership. (b) What is the function of the trustee in case it acts as depositary under terms of such agreement? (c) What is the advantage of having "agents of depositaries"?

447. Business of Trust Company—Corporation Activities: Conversion of Corporate Securities

Associated Gas and Electric Company
Secured Gold Bonds, 6½% Convertible Series of 1924

Exchange Offer

To the Holders of said Bonds:

Associated Gas and Electric Company hereby offers

(a) To deliver 36 shares of its Class A Stock in exchange for each $1,000 principal amount of its Secured Gold Bonds, 6½%, Convertible Series of 1924, but only for $500,000 principal amount thereof which are first presented for such exchange; accrued interest on such Bonds to be adjusted in cash at the time of exchange; and

(b) To deliver 20 shares of its Original Series Preferred Stock in exchange for each $1,000 principal amount of said Bonds, but only for

$500,000 principal amount thereof which are first presented for such exchange; accrued interest on such Bonds and accrued dividend on such Preferred Stock to be adjusted in cash at the time of exchange.

Any holder of such Bonds desiring to avail himself of this offer must present and deliver his Bonds, or cause the same to be presented and delivered, with all unmatured coupons attached, in negotiable form, to The Chase National Bank of the City of New York, the Trustee of the Indenture securing said Bonds, on or before July 1, 1925, which will deliver in exchange therefor, in accordance with the delivery instructions accompanying the bonds, certificates for said Original Series Preferred Stock or Class A Stock, as requested by such holder, at the rate aforesaid. Deliveries will not be made before May 1, 1925.

(a) Explain the term "Secured gold bonds, 6½% Convertible Series of 1924" and the terms "Class A Stock" and "Original Series Preferred Stock." (b) What is the function of the trustee in the conversion of bonds to stocks?

448. Business of Trust Company—Corporation Activities: Issue and Redemption of Equipment Trust Certificates

NOTICE OF REDEMPTION OF TRUST CERTIFICATES

Notice is hereby given that the undersigned, Transcontinental Oil Company, pursuant to the provisions of the Trust Certificates and of the Agreement hereinafter mentioned and in accordance with the resolution duly adopted by its Board of Directors, has exercised its option to redeem the entire issue of NATIONAL STEEL CAR LINES EQUIPMENT TRUST CERTIFICATES, SERIES B, dated as of June 1, 1921, between National Steel Car Lines Company, Vendor, Columbia Trust Company, Trustee, and Transcontinental Oil Company, Lessee, and that the entire issue of said Trust Certificates is hereby called for redemption on June 1, 1925, at a premium of three per centum (3%) upon the principal thereof, together with accrued dividends to said date, and said Trust Certificates will be so paid at said rate upon surrender thereof (with all unpaid dividend warrants attached) to the Trustee, Irving Bank-Columbia Trust Company (former name Columbia Trust Company), at its principal office in the City of New York, New York, No. 233 Broadway (or, at the option of the holder or registered owner, at No. 60 Broadway, Borough of Manhattan, City and State of New York) on or after June 1, 1925. Dividends on the Trust Certificates will cease on and after June 1, 1925.

Dated March 23rd, 1925.

TRANSCONTINENTAL OIL COMPANY

(a) What is an equipment trust certificate? (b) Explain the relationships of the owner of the car equipment, the lessee, the trustee, and the owner of the certificates. (c) What are the duties of the trust company as trustee in this sort of transaction?

449. Trust Company as Transfer Agent

Because of The Corporation Trust Company's close contact and perfect familiarity with all matters affecting a corporation's welfare, and its unequalled sources of information regarding the laws, practices and court decisions in all states—information which is very important in making stock transfers on a corporation's books—this company is unusually well fitted to serve corporations in the capacity of transfer agent, co-transfer agent or registrar.—[Advertisement.]

(a) Are "close contact and perfect familiarity with all matters affecting a corporation's welfare," and "unequalled sources of information regarding the laws, practices and court decisions in all states" essential or important qualifications of a transfer agent? of a registrar? (b) What is a "co-transfer agent"?

450. Trust Company Functions: Issue of Land Trust Certificates

The Bankers' Building, Chicago, 1926, July 10.

Each certificate represents 1-5000th undivided interest or multiple thereof in the equitable ownership in the fee simple title to approximately 22,500 square feet of land located at the southwest corner of South Clark and West Adams Streets in the heart of the financial district of Chicago.

The title to the land is to be vested in the National Bank of the Republic of Chicago, as Trustee, the title being insured by the Chicago Title & Trust Company. The certificates are to be dated as of June 1, 1926, from which date rental is payable at the annual rate of $55.00 per 1-5000th part, payable quarterly to the Trustee and by it disbursed by check on the first days of March, June, September and December, to the Certificate holders registered as such on the next preceding twentieth days of February, May, August and November.

These certificates are subject to retirement as a whole at any time within 50 years from date of the lease, at $1,100 plus accrued rental for each 1-5000th part, upon the exercise by the lessee of its option to purchase the premises covered by the lease upon three months' written notice to the Trustee.

All certificates are fully registered on the books of the Trustee, and transfers are effected by executing the forms on the back of the certificates which correspond to the forms required for transfer of real estate in Illinois.

The land represented by these certificates is to be leased for a period of 99 years from June 1, 1926, to the Adams Clark Building Corporation, which will operate the Bankers Building to be built on this land. By the terms of this lease the lessee will agree to construct the building and to pay, in addition to all taxes and assessments on the lease, premises and Trustee's charges, $275,000 per annum rental for distribution to the registered holders.

(a) Explain the relations among the bond houses marketing the certificates, the National Bank of the Republic, the Chicago Title and Trust Co., the Adams Clark Building Corporation. (b) List the functions of trust companies indicated in this advertisement.

451. Business of Trust Company—Corporation Activities: Trustee of Mortgage Securing Bonds

To the Holders of
First Mortgage 5% Gold Bonds
of the Colorado Power Company, Due May 1st, 1953

Notice Is Hereby Given: that sealed proposals for the sale of bonds of the above described issue under the Mortgage from said Company to Columbia-Knickerbocker Trust Company, as Trustee, for account of Sinking Fund, to the extent of Twenty-Seven Thousand Eight Hundred Thirty-Six Dollars Fifty Cents ($27,836.50) at a price not exceeding 105% of the principal thereof and accrued interest will be received by the Corporate Trust Department of the undersigned, 60 Broadway, New York City, on or before May 20th, 1925, at twelve o'clock noon. Bonds accepted must be delivered on May 22nd, 1925, or security furnished that day, if required, that delivery will be made within ten days. The right is reserved by the undersigned to reject any and all proposals.

Irving Bank-Columbia Trust Company, Successor Trustee,
By A. N. Hazeltine.

(a) The Irving Bank-Columbia Trust Company is called "successor trustee" to the Columbia-Knickerbocker Trust Company: what is meant? (b) What is the significance of the "Corporate Trust Department"? (c) Why should the trustee make bids for a specific security for sinking fund investment?

452. Business of Trust Company—Corporation Activities: Sinking Fund Operations

The Syracuse Lighting Company, Inc.
First and Refunding Mortgage Gold Bonds 5½% Series Due 1954
Sinking Fund Notice

Notice is hereby given that The Equitable Trust Company of New York, as Trustee under the First and Refunding Mortgage dated February 1, 1924, made by The Syracuse Lighting Company, Inc., hereby invites offers for the sale to the Sinking Fund at prices not exceeding 106% of their principal amount and accrued interest, of as many of the above mentioned bonds as will be sufficient to exhaust as nearly as may be the sum of Thirty-five Thousand Five Hundred Forty-six Dollars Ninety-three Cents ($35,546.93) now held in the sinking fund under said Mortgage. Sealed offers should be addressed to The Equitable Trust Company of New York, Trust Department, 37 Wall Street, New York City, and will be opened by the undersigned on May 14, 1925, at 12 o'clock noon. The right is reserved to reject any and all offers in whole or in part. Dated New York, N. Y., May 4, 1925.

The Equitable Trust Company,
of New York, Trustee.

(a) What is meant by "Trustee under the First and Refunding Mortgage"? (b) What is a "sinking fund," and what does a trustee

have to do with it? (c) Is it necessary for the trustee to ask publicly for offers when it plans to invest this fund?

453. Business of Trust Company—Foreign Government Fiscal Agency

To Holders of The Kingdom of Belgium 25-Year External Gold Loan 7½% Sinking Fund Redeemable Bonds Issued Under Loan Contract Dated May 28, 1920:

Notice Is Hereby Given that, in accordance with the provisions, of Section 1 of Article 2 of the above mentioned contract with the Kingdom of Belgium, the undersigned Messrs. J. P. Morgan & Co. and Guaranty Trust Company of New York, constituting the Bankers under the said contract, have received the sum of $2,300,000 as a Sinking Fund for the redemption and payment of the Bonds provided for in said contract.

A drawing has been held in accordance with Section 2 of Article 2 of the above mentioned contract and 25-Year External Loan 7½% Sinking Fund Bonds bearing the following distinctive numbers have been drawn by lot by the undersigned, as Bankers under said contract, for redemption at 115% of the principal sum thereof on June 1, 1925, to wit: (Bond numbers omitted.)

Bonds so drawn for redemption will be paid on and after June 1, 1925, at the rate of 115% of their par value, at the Offices of J. P. Morgan & Co., 23 Wall Street, or Guaranty Trust Company of New York, 140 Broadway, both of the Borough of Manhattan, City of New York, upon presentation and surrender of said Bonds with the December 1, 1925 and subsequent coupons attached. Interest will cease on all such drawn Bonds on and after June 1, 1925.

J. P. Morgan & Co.
Guaranty Trust Company of New York.

(a) What is the nature of the contract referred to between Belgium and the Morgan and Guaranty interests? (b) Explain "bonds drawn for redemption."

454. Joint-Stock Land Bank Bonds

The accompanying description of an issue of joint-stock land bank bonds was issued by a bond house as an advertisement, with a view to promote their sale.

Security

These bonds are direct obligations of the First Joint Stock Land Bank of Chicago and secured by deposit with the Registrar of the Farm Loan Bureau of the United States Treasury Department, of United States Government bonds or first mortgages upon improved farms, not exceeding 50% of appraised value of farm lands and 20% of the appraised permanent insured improvements thereon, in the states of Illinois and Iowa, admittedly the finest agricultural section in the country.

All of the mortgages have been approved by the Federal Farm Loan Board based upon the appraisals of their own agents operating in their

respective territories. In addition to government inspection of the properties, the bank has had independent appraisals made by their own experts.

All bonds of the Bank are protected not only by an equity represented by at least 100% of additional land value, but also by the paid-in capital stock of the bank carrying double liability, and the accumulated surplus and reserves.

The Bank's statement of March 1, 1922, shows a paid-in capital stock of $1,500,000 and surplus and reserves of $272,579.58.

Tax Exempt Features

We quote hereunder from the actual bonds certified to by the Registrar of the Federal Farm Loan Bureau of the United States Treasury Department as follows: "This bond is issued under authority of the Act of Congress approved July 17, 1916, which provides that—Farm Loan Bonds issued under provisions of this act . . . *and the income derived therefrom, shall be exempt from Federal, State, Municipal and Local Taxation.*"

We quote from the decision rendered by the United States Supreme Court February 28th, 1921, as follows: "These banks are constitutionally organized and the securities here involved are legally exempt from taxation."

Government Supervision and Operation

This bank was chartered on July 25th, 1917, where it was "granted authority and power to loan money, issue its bonds, and to do all other things provided for, and in accordance with the provisions in the act of Congress, approved July 17, 1916, known as the 'Federal Farm Loan Act' and to do all other things implied or incidental thereto within the State of Illinois and the contiguous State of Iowa." This charter was granted by the Federal Farm Loan Board, which exercises supervisory powers over the Land Banks, similar to the Federal Reserve Board over the twelve Federal Reserve District Banks.

The Federal Farm Loan Board must approve all loans and they shall appoint land bank examiners—"said examiners shall be subject to the same requirements, responsibilities and penalties as are applicable to national bank examiners under the National Bank Act, the Federal Reserve Act and other provisions of law. They shall examine and report the condition of every Federal Land Bank and Joint Stock Land Bank at least twice each year."

In addition thereto the board is furnished with a complete record of bonds issued and mortgages deposited and also monthly detailed statements of all payments of principal and interest.

The Secretary of the Treasury is ex-officio chairman of the Federal Farm Loan Board.

Although the operations of the Bank are thus carefully restricted and supervised by the Government, it is under private ownership and management.

Its officers and directors have had many years' successful experience in similar operations in the same states (Illinois and Iowa) and the Bank has paid regular dividends at the rate of 8%, which has recently been increased to 9%.

By Act of Congress these bonds, prepared and engraved by the Treasury Department, are declared instrumentalities of the United States Gov-

ernment, legal investments for all fiduciary and trust funds under the jurisdiction of the Federal Government, and acceptable at par as security for Postal Savings and all other deposits of Government funds.

(a) Compare the statements made with the Federal Farm Loan Act and see whether the statements made are all strictly true. (b) Are there any weak features of these bonds not set forth by the house? (c) Show how each of these statements is presumed to be a selling point for the bonds.

455. Objections to "Securities Companies" Closely Allied to National Banks

. . . these adjunct or auxiliary companies whose stockholders are identical with the stockholders of the national banks with which they are connected by various ties and devices frequently deal actively in stocks, and they also sometimes acquire the ownership or control of other banks, national and State, through their stock purchases.

In times of rising prices and active speculation some of these auxiliary corporations have made large profits through their ventures and syndicate operations, but their losses in other periods have been heavy, and they have become an element of increasing peril to the banks with which they are associated. The business of legitimate banking is entirely separate and distinct from the kind of business conducted by many of these "securities corporations," and it would be difficult, if not impossible, for the same set of officers to conduct safely, soundly, and successfully the conservative business of the national bank and at the same time direct and manage the speculative ventures and promotions of the ancillary institutions. These varying institutions demand a different kind of ability and experience on the part of those who manage them, and the two types of business when combined with one management are likely to be operated to the advantage of neither.

A national bank lends not only its own capital but the money of its depositors, and in doing this is not expected to tie up its funds in long-time and unliquid loans in doubtful ventures. The "securities companies" theoretically invest and speculate with their own funds—that is to say, the funds supplied by their own stockholders—not with the funds of depositors; but as a matter of fact, experience shows that "securities companies" often draw and absorb large sums of money from the allied national banks, and sometimes also borrow heavily from other national banks which operate other "securities companies," and so on, in an endless chain of reciprocal borrowing and mutual lending for the accommodation of speculative cliques.

These ancillary companies are being used with increasing frequency for promotion of speculation and for dealings in bonds and stocks, often those of new and unseasoned issues, and which are attended with improper hazard risk, and as a means of enabling banks to do, indirectly through their instrumentality, things which they can neither safely nor lawfully do directly.—[Report of the Comptroller of the Currency, 1920, p. 56.]

(a) Name some banks which have established "securities companies" alongside. (b) Should the certificates of stock of "securities

companies" be tied up with the certificates of stock of national banks, making joint transfer necessary? (c) Does a bank having such an ancillary "security company" continue to participate in underwriting operations? (d) Are there any important reasons for the intimate alliance of a commercial bank and a "securities company"? Is the alliance based on lower cost of operation, service to customers, control of funds once received as deposits?

456. The Cash Loan Department of a Brokerage House

A certain New York brokerage house on a certain date announced that it made cash loans at current rate of interest for long or short periods on active listed stocks and bonds. It asked that the owner indorse the stock certificate, have it witnessed and dated, and forward it to the house by registered mail; the house would then forward New York funds for the amount of the loan. Loans were similarly made toward the purchase of additional stocks or bonds; securities having a loan value of, say $1,000 were accepted as equivalent of that amount of cash toward additional purchases of active listed securities. To illustrate:

Stock	Current Price	Value	Open Acc. Requirement	Loan Value
100 A. T. & T.	$118	$11,800	$1,500	$10,300
100 U. S. Stl. Com.	91	9,100	1,000	9,100
Etc., etc.				

Stock	Current Price	Value	Open Acc. Requirement	Loan Value
50 A. T. & T.	$118	$ 5,900		$ 5,150

can be utilized to buy the following stocks on open account:

Stock	Current Price	Value	Open Acc. Requirement	Loan Value
100 U. S. Stl. Com.	$ 91	$ 9,100	$1,000	
100 Utah Copper	62	6,200	1,000	
100 Penn. R. R.	35	3,500	750	
200 Kennecott Copper	27½	5,500	1,000	
100 Sinclair	19	1,900	500	
20 General Motors	87½	1,750	590	
		$27,950	$4,840	

(a) Where does the brokerage house procure the funds to make such loans to customers? What rate of interest does it pay? (b) At what margins does the house make loans to customers? Is this greater or less than the margins required by the banks of the Street? (c)

Suppose that on the 10th day after the purchase of this group of stocks the customer closed them out, at the following prices: U. S. Steel, 95; Utah Copper, 68; Penn. R. R., 35; Kennecott Copper, 29; Sinclair Oil, 20½; General Motors, 10¾. Calculate the profit of the customer, after he paid the usual brokerage for buying and selling, and 6% interest on his borrowings. What per cent profit would he be making on his marginal open market requirement? Has the customer been enjoying the dividends, if any, on the A. T. & T. stock pledged with the broker during the 10 days? (d) What is meant by "diversification" of stocks in speculative purchases?

457. Syndicate Management

Extract from agreement of the United States Steel syndicate:

> J. P. Morgan and Company shall be sole managers of the syndicate, and in behalf of the syndicate they may make any or all arrangements, and may perform any and all acts, even though not herein provided for, in their opinion necessary or expedient to carry out the provisions of this agreement; or to promote or protect what they deem to be the best interests of the syndicate. The enumeration of specific powers in this or any other article of this agreement, shall not be construed as in any way abridging the general powers of this article intended to be conferred upon or reserved to J. P. Morgan and Company.

(a) What is the reason for clothing the manager of the syndicate with such unrestricted power? (b) Instance some things often done "to promote or protect what they deem to be the best interests of the syndicate." (c) Are the accounts of the manager of the syndicate subject to review or audit by the other members of the syndicate, to determine the syndicate profits and their proper distribution? Is there any control of this feature? (d) What is the range of underwriting commissions? What factors determine the commission?

458. Marginal Purchases—Carrying Stocks on Account

Suppose an operator in November 1917, made the following purchases on the New York Curb market:

1. In the industrial field, 500 shares of Keystone Tire & Rubber Co., controlled on account at $12 a share ($6,000 worth) by a deposit of $2,000, plus a commission of $62.50, a total of $2,062.50. During the year cash dividends (less interest charge for the loan of two-thirds of the value of the shares controlled) of about $360 would have been received, as well as a stock dividend of 15% equal to $1,650 on the November 1918 market price of $22 a share. In addition, due to market enhancement from $12 to $22, a further profit on 500 shares at $10 a share of $5,000, less commission, is shown. This makes a net

profit of about $5,880 on a deposit of $2,000, and an outlay of about $130 in commissions, tax, etc.—a return of about 323%.

2. In the oil field, 1,000 shares of Oklahoma Producing & Refining Co., controlled on account at $6.50 a share by a deposit of $2,167 and $62.50 commission, a total of $2,229.50. Meanwhile cash dividends (less the interest on the loan of two-thirds of the value of the shares controlled) of about $115 would have been accumulated, and in addition the rise in market price of from $6.50 to $9.50 a share a year later indicates a market profit of $3,000, less commission. This makes $2,985 on a deposit of about $2,167 and an outlay of less than $130 in commission, tax, etc.—a return of about 130%.

(a) Work over these calculations: are there any errors? Have any items of expense been omitted? (b) How were the banks related to these operations? Did the broker borrow funds on the call loan or the time loan market? (c) Do the methods of loan, purchase, marginal account, etc., differ on the Curb from those on the New York Stock Exchange?

459. Bond House Activities

(a) Is the analysis of credit by an investment house, about to underwrite some securities for a corporation, different from the analysis of credit by a commercial banker about to loan the corporation some money? How does the concentration of risk in a single large issue of securities affect the problem? (b) By how much should the equity of the borrowing corporation exceed the par value of the bonds issued? (c) Does the partial payment method of purchasing bonds differ from margin purchasing on the exchange? (d) If an underwriting house pledges the underwritten securities at a commercial bank for a loan is the speculative character of the loan greater than if the funds had been loaned to a merchant? (e) In what senses are commercial banks becoming more and more like investment banks? Is the tendency propitious?

460. Bond House Influence

(a) Explain the terms "money trust," "interlocking directorate," "exclusive financial agency," "voting trusteeship," "sphere of influence." (b) Railroad consolidation, development of trusts, banking concentration—is there causal relationship between any of these? (c) How does the investment banker control the following: the organization of corporations, the sellers of the securities of corporations, the financial policies and operations of the corporations organized and financed, the trust companies, the commercial banks, the insurance companies? (d) Has the growth of financial concentration been nat-

ural (that is, due to the operation of economic forces), or due to poor legislation, such as the national bank law and the Sherman Act, or due to a conspiracy of the wealthy? (e) It has been frequently charged that the Panic of 1907 was "engineered" by the banking fraternity: is there evidence of it? (f) What are the purposes of interlocking directorates? What is the philosophy underlying the Clayton Act?

461. Principles of the Investment Trust

The typical investment trust will show the following characteristics:

1. It raises capital by issuing stock, generally both preferred and common; and it frequently exercises its borrowing powers by creating bond indebtedness, and occasionally in other ways.

2. The funds so obtained it invests and reinvests in a wide variety of securities, distributing risk over many industries, countries, and types of issues.

3. It appeals to the cautious investor by offering bonds and stock participation in reasonable denominations; and it aims to protect his interests, whatever the nature of his holdings, by skilful management of the investment portfolio.

4. In addition to offering the greater security which results from intelligent diversification, the typical investment trust holds out to its common stockholders the expectation of considerable enhancement in earning power of their shares. This primarily arises from (a) a higher yield than can be safely obtained without a volume of capital permitting considerable spreading of risk; (b) the reinvestment of borrowed funds at higher return than the cost of these funds to the borrowing investment trust; and (c) the balance of capital gains (generally used to strengthen reserves) which a well-conducted trust should show as the outcome of its managerial alertness.—[L. R. Robinson, Investment Trust Organization and Management, The Ronald Press Company, New York, 1926, pp. 5-6.]

(a) How does the investment trust exemplify the principle of diversification? (b) How does an investment trust differ from an ordinary trust company? (c) How do you account for the fact that the investment trust has had a much more extensive development in England than in the United States? (d) Summarize the advantages of an investment trust to the investing public. (e) What, if any, dangers are involved in the future development of the investment trust in the United States?

462. Investment Trust

I. Expenses.

You will note that the total expense of our Trust on a yearly basis is only four-tenths of one per cent, and that nearly half of this is trustee's counsel fee, which is a non-recurring item. When the Trust has become a little larger we hope to reduce this expense item to ⅛ of 1%. This invites comparison with any other Investment Trust that we know of.

(a) Classify the expenses of an investment trust. Why are trustee's counsel fees so high a proportion, in a young trust? (b) Is the business subject to the "principle of increasing returns"?

II. Distribution of investments.

Question: Can you give us some idea as to the kind of bonds that our Trust owns? Are they speculative, or what is commonly known as a business man's investment, or are they sound investments?

Answer by President:

We have checked up the ratings on our bonds with the Standard Statistics Company (the largest financial statistical organization in the world), and we find that out of our total number of bonds (96) there were 91 rated, and the average rating on all of them was "A," which is defined as "bonds in this class may be regarded as sound from an investment standard." Therefore, our bonds are not speculative, or even a business man's investment; they are sound investment issues.

Annexed to the auditors' report is a full list of the securities owned. The total number of different investments is 117, and you may be interested in the following analysis of them: We hold 83.64% in mortgage bonds and debentures, 9.38% in preferred stocks and 6.98% in common stocks, which we consider a very satisfactory diversification. Considered from the geographical position, we have invested 86.66% of our funds in the United States and 13.34% in Foreign countries, mostly government issues. You will also be interested in knowing that 30.66% of the whole Investment Fund is held in short term securities of not over 3 years' maturity.

(a) Comment on the distribution shown, with respect to bonds and stocks, and geography, and maturity. (b) Should investment trusts own speculative securities? As the number of securities owned increases may their speculative character increase with impunity?

CHAPTER XVIII

THE SMALL LOAN BUSINESS

463. Relation of Installment Method of Merchandising to the Small Loan Business

(a) Procure a sample of the contract used by a local dealer selling automobiles, radios, washing machines, or other article, on the installment method. Compare the obligations which the buyer assumes with the obligations which the borrower at the Morris Plan Bank assumes in his loan contract and the contract for the purchase of a "C" investment certificate. Compare the price which the dealer asks the installment buyer with the price he asks the cash buyer; the difference represents the cost of the credit: how does this cost compare with the charges of the Morris Plan Bank for the loan? (b) Is the dealer in merchandise equipped with a credit department, guided by rigid and safe credit principles, comparable with the credit department of the industrial bank? If not, do you advise handling the installment business through the industrial bank? (c) Exactly opposite views are held on the proposition that installment merchandising promotes thrift. Give the arguments for and against. Do the arguments apply equally well if the installment business is handled through the industrial bank? (d) Suggest reasons why the commercial banks may well establish industrial loan departments. Give reasons why they may well leave this type of business to specialized industrial banks.

464. Salary Loan Business

See data on following page.

(a) What is meant by "salary loan"? by "assignment of wages"? (b) Is the salary loan a secured loan? Is the risk factor high? (c) What is the attitude of the employer toward his employé's getting a loan from a salary loan company? Does he know the loan is placed? (d) The transaction is made one of purchase and sale of the salary, and the usury law does not therefore apply. Explain. (e) Are salary loans indorsed by others as additional security? (f) Some states have authorized legal rates on salary loans from 1½ to 3% per month. Why are such high rates allowed? Does the table indicate that these rates are exceeded in practice in New York?

TABLE SHOWING TOTAL CHARGES EXPRESSED IN TERMS OF AN INTEREST RATE, UPON SELECTED LOANS MADE BY ONE REPRESENTATIVE SALARY LOAN COMPANY

Amount of Cash Received by the Borrower	Payments			Total Amount Paid by the Borrower	Amount Paid in Excess of the Amount of Cash Received	Annual Interest Rate
	Amount of Each	When Due	No.			
$17.00	$ 2.00	Weekly	12	$24.00	$ 7.00	329%
21.50	2.50	"	12	30.00	8.50	316
26.00	2.45	"	16	39.20	13.20	310
26.00	3.00	"	12	36.00	10.00	308
34.00	4.00	"	12	48.00	14.00	329
34.00	2.65	"	20	53.00	19.00	277
39.00	9.00	Bi-weekly	6	54.00	15.00	286
40.00	4.50	Weekly	12	54.00	14.00	280
40.00	20.00	Monthly	3	60.00	20.00	300

[Based on C. W. Wassam, The Salary Loan Business in New York City, pp. 21–41.]

465. Cash Credits

The following quotations have been taken from Senate Doc. 405, 61st Congress, 2nd session, Interviews on Banking and Currency Systems of England, Scotland, France, Switzerland and Italy. [National Monetary Commission Report, Washington, D. C., 1910.] The following answers to the question asked were made:

I. *Q.* Explain the phrase "cash credits," and upon what conditions they are given. *A.* A customer applies to be allowed to overdraw such amount as he may require from time to time up to a specified amount, and he and two or three sureties jointly and severally become bound to repay the amount that may at any time be owing with interest, on demand being made on them. Each obligant is liable to pay the whole sum, leaving him to obtain repayment from his co-obligants. [Interview with Adam Tait, Cashier and General Manager, Royal Bank of Scotland.]

II. *A.* A "cash credit" is a credit allowed, in virtue of which a customer may draw checks on the bank until the balance due to us reaches a certain fixed limit. The account is an ordinary operative one, and interest is charged on the balances actually due to the bank from day to day. The security provided is usually personal, two or more sureties signing the cash credit bond along with the principal, each surety being liable for the amount advanced up to the limit of the credit. [Interview with Sir George Anderson, General Manager, Bank of Scotland.]

III. *A.* A cash credit is simply a current account on which the holder may draw to a fixed amount, interest being calculated and paid on the daily balance. In security the applicant and his sureties, termed the co-obligants, sign a formal bond under which they jointly and severally guarantee to repay to the Bank when called upon the amount of the debt and the accrued interest. [Interview with Robert Blyth, General Manager, Union Bank of Scotland (Ltd.).]

IV. *A.* A cash credit account is an operative current account in security of which the principal debtor and two or more co-obligants have granted a personal bond in favor of the Bank. The account is operated upon by the principal debtor, but all the parties are bound as principals and are jointly and severally liable to the Bank. [Interview with Alexander Bogil, General Manager, Commercial Bank of Scotland (Ltd.).]

(a) Why are cash credits as used in Scotland regarded as personal credit? (b) What influence has this system of extending credit had upon small borrowers in Scotland? (c) Wherein does the cash credit system of Scotland differ from the overdraft system used in England? (d) What are the liabilities of the "co-obligants" under a cash credit? (e) Do the parties interested sign promissory notes?

466. Development of Cash Credits

1. Origin

The name of the author of the system is unknown, but the Royal Bank has the merit of inaugurating it. The directors' minute is dated, we are informed, 12th March 1728, and on 31st May following the first cash-credit was granted to William Hog, Jun., merchant in Edinburgh who afterwards became a private banker on his own account.

2. Principle

A trader or other person not possessed himself of sufficient capital for the conduct of his business, but who could command the good opinion of two or three other persons of known position of good repute, applied to a bank to have a current account opened in his name on which he could draw. To secure the probable and fluctuating debt, the applicant and the other persons, he being called the drawer and they the co-obligants, signed a formal bond by which they jointly and severally, guaranteed to repay to the bank, when called on, the amount of debt and accrued interest.

The universal adoption of the system in after years was accompanied by material benefits to the nation. In a poor but energetic country, such as Scotland was in those days, there are always many industrious and intelligent people who, from want of capital, are unable to exercise their prowess beyond the limits of every day requirements. If they are enabled, by the operation of credit, to increase their business, their profits are proportionally increased, and they are supplied with the means of repaying their creditors, and eventually accumulating private wealth. At the same time, the wealth of the nation is increased by the greater productiveness of the national industry. Thus it was that Scotland advanced through the instrumentality of its banking system, as in that system the practise of lending money without tangible security, in reliance on the respectability of the applicant, guaranteed by two or three responsible persons, has been, perhaps, the most patent element. The superior affluence of the general public now-a-days renders the cash-credit system of less importance in comparison with other departments of banking than formerly; but even yet, especially in small centers of population, its beneficial effects are largely operative.

Following the good example shown by the Royal Bank, the Bank of Scotland soon began to show the advantages of competition, by courting the favour of the public by increasing banking facilities. In 1729, they adopted the cash-credit system and in the same year they commenced to allow interest at 5% per annum on deposits; "on the Treasurer's Bond." These were presumably the precursors of the more modern "Deposits receipts."—[A. W. Kerr, History of Banking in Scotland, 3rd ed., A. C. Black, Ltd., London, 1918, pp. 48-50, by permission.]

(a) Is the cash-credit system peculiar to Scotland, or has it found its way into other countries? (b) Compare it in principle and operation with the Morris Plan now in operation in this country. (c) Does it serve the same purpose in Scotland that the credit unions or remedial loans do in the United States? (d) What disadvantage, if any, do you see in this system?

467. Remedial Loan Association

The remedial loan associations, which have come into existence during the last few years, furnish a satisfactory source of credit for the man who has personal property to pledge or mortgage. There are now 36 in the United States with a combined capital of over $12,000,000 and their number is rapidly increasing. They are usually joint stock companies formed not primarily for gain but to provide small loans to deserving borrowers at rates sufficient to pay the operating cost and a limited return upon the capital. They can justly lay claim to considerable educational work and many of their borrowers are benefited morally as well as materially by contact with them. They are doing a meritorious work and by their competition are rapidly forcing the loan sharks in many cities to reduce their rates or discontinue operations, but on account of their business-like requirements their field is necessarily limited. They cannot loan to the man who does not possess the required security, and because of their impersonal character they cannot effectively attempt to encourage borrowers to become thrifty in order to provide in advance for the emergencies which led to their distress.—[A. H. Ham and L. G. Robinson, Credit Union Primer, pp. 4-5.]

(a) What is a "loan shark"? Is a remedial loan society supposed to work in direct competition with them? (b) Do remedial loan associations compete with commercial banks? with credit unions? (c) How extensively have they been organized in different states? (d) What is their essential purpose?

468. Loans by Credit Unions

One credit union provided in the by-laws the conditions under which loans may be granted to borrowers:

Section 1. No member may borrow from the corporation if he is not in good standing, or if he has failed to repay any previous loan, or

if he is in arrears in the payment of any current loan or installments thereon, or if his endorsers or sureties have ever been called upon to pay any of his obligations.

Section 2. No loan shall be made except on written application signed by the person desiring the loan, showing the date, name of applicant, amount asked for, and the purpose for which the loan is desired, nor except upon the approval in writing endorsed thereon of at least two-thirds of the members of the credit committee. All applicants for loans shall be filed.

Section 3. No loans shall be made to a member already indebted to the corporation unless he shall at the time of taking out the second loan, pay the balance of the previous loan. Any interest which may have been paid in advance on such previous loan, for a period beyond the date of taking out the second loan, shall in such case be applied toward the interest on the second loan.

Section 4. A member failing to pay an installment on a loan when due, unless excused therefrom for cause by the Board of Directors, shall pay a fine of one cent per week on each two dollars, or fraction thereof remaining in arrears. If his installments, interest or fines, remain unpaid for three months the Board of Directors shall have authority to take such steps toward terminating his membership and making collections as may in its judgment be advisable.—[By-Laws of the Boston Post Office Employees Credit Union, section VII.]

(a) May a non-member borrow from a credit union? Why? (b) Why is it necessary to pay off an old loan before making a new one, especially if the old is quite small? (c) Should credit unions impose fines upon their member borrowers for not meeting their installment payments? (d) What are the duties and powers of credit committees of credit unions?

469. Co-operative Buying by Rural Credit Unions

One feature of rural credit union loans is worthy of special mention. In North Carolina there is already considerable co-operative buying by credit union members of the things which they use in common. Farmer A, needing fertilizer in less than a carload lot, combines with Farmers B, C, D, and E to buy, through the credit union of which they are all members a car load of fertilizer, which quantity represents their joint need. They do this by pooling their joint credit, each assuming so much of the joint loan as represents his proportionate part of the fertilizer. Three advantages accrue to each of them from the transaction. They each enjoy the benefit of the wholesale price and cash discount. Each one has such time to pay back his part of the joint loan as is reasonably required. This is co-operative buying in fact and is applied not only to the purchase of fertilizer but other commodities which farmers use in common.—[Bergengren, The Credit Union, 13th ed., p. 11.]

(a) Explain just how this operation is carried out. (b) How does it differ from the ordinary "buying club"?

470. Advantages of Urban Credit Unions to Laborers

City Employes Credit Union of the City of Boston:

It was organized in 1915 as a result of an investigation conducted by the then mayor of Boston, James M. Curley. Quoting from a speech delivered by him at the annual meeting of the members of the credit union on November 20, 1917. "This investigation revealed the facts that city employes were being grossly imposed upon . . . the situation among the city laborers was such that on an average over a hundred men lost a half day's pay each week in order to make necessary arrangements with money lenders to withdraw assignments of wages filed against them with the City Treasurer. In addition, these men were being charged interest at the rate of 180 per cent a year on their loans. They were entirely at the mercy of the loan sharks. This condition happily no longer exists." He then outlines the service which had been rendered by the credit union up to that time. According to the 1922 report of the Bank Commissioner this credit union now has assets of $51,561.81. It has 1064 members and makes loans to such of them as require it at 8 per cent interest per annum and pays a 6 per cent dividend. The condition which formerly prevailed has been entirely eliminated.—[Bergengren, The Credit Union, 13th ed., p. 13.]

(a) Suggest various groups that might well organize credit unions. Is the bond of common employment necessary? What other groupings may succeed? (b) What margin of gross earnings over net is left to cover expenses? If the demand for loans is less than the supply of loanable funds, what does the credit union do with the excess? (c) What is meant by "assignment of wages"? (d) Do the state laws governing investments of savings banks apply to the credit unions? (e) In Massachusetts in 1924 there were 15,000 borrowers and 40,000 members of credit unions: what is the significance of this disparity?

471. The Guaranty Fund of a Credit Union

Every credit union has a guaranty fund made up of the entrance fees, transfer fees, fines for delinquencies in the payment of shares or the payment on loans and a substantial part of the dividends each year, which fund is carefully segregated from the investment funds of the credit union and serves as a guaranty fund against bad loans.—[Bergengren, The Credit Union, 13th ed., p. 17.]

(a) In what sense is this a guaranty fund? (b) How does the guaranty fund make for stability of the union?

472. Prevalence of Credit Unions in Europe

Personal credit in agricultural Europe is obtained usually by means of the cooperative credit associations. They are also used by artisans and small trades people in towns and cities. With their aid poverty and usury have been banished, sterile fields have been made fertile, pro-

duction has been increased and agriculture and agricultural science raised to the highest point. . . .

In Belgium in 1909, 458 of these institutions, with a membership of 25,762 had outstanding four millions of dollars of loans.

In France 2,983 local banks of this character with a membership of 133,000 farmers had $2,622,241 capital and a record of over twenty millions of dollars of operations. There are nearly 6,000 of these banks in Austria. The membership was 725,666 and the loans ran over eighty-six million dollars.

In Italy 690 banks had furnished reports, showing a working capital of over $170,000,000.

In Germany there was one such bank for every 1,600 of the population and the total business done was nearly five billion dollars.—[Report of the Taft Commission on Rural Credits.]

(a) Consider the following factors that may account for the great development of the credit union in Europe: (1) the sedentary character of the population; (2) the thrifty character of the peasants; (3) the prevailing low incomes of the people; (4) the failure of the central banks to provide for the needs of small borrowers; (5) the success of cooperation in other lines, such as retail distribution. Suggest other factors. (b) What conditions in the United States hindered their development? (c) What is the "Credit Union National Extension Bureau"? "The Credit Union League," Boston?

473. Building and Loan Associations

Building and loan associations have had a fairly substantial and continuous growth in the United States since 1893. Reports show that from over 5,000 in 1893 the number has increased to more than 12,400 in 1925. Inasmuch as they are subject to state laws, the type of organization and method of operation vary from state to state. The changes in the number of associations, membership and total resources since 1893 are given in the following table:

Statistics Relating to Building and Loan Associations in the United States

Year	Number of Associations	Total Membership	Total Assets
1893	5,598	1,349,437	$ 473,100,000
1895	5,770	1,545,129	579,600,000
1900	5,356	1,495,136	571,400,000
1905	5,264	1,642,127	629,300,000
1910	5,869	2,169,893	931,900,000
1915	6,806	3,334,899	1,484,200,000
1920	8,633	4,962,919	2,519,900,000
1921	9,255	5,809,888	2,890,764,621
1922	10,009	6,864,144	3,342,530,953
1923	10,744	7,202,880	3,942,939,880
1924	11,844	8,554,352	4,765,937,197
1925	12,403	9,886,997	5,509,176,154

The relation of building and loan association to land credit is set forth by one writer as follows:

A promising source of land credit is the building and loan association. These associations are formed primarily for the promotion of thrift among members. They have a variable capital which they lend to their members for the purpose of building or acquiring homes. Until recently, their activities were generally confined to lending on the security of urban property, but in some states the law has been amended to enable them to extend their operations to the rural districts. The building and loan associations of Ohio have, for several years, been lending on the security of farm lands with conspicuous success. In 1914, they had 8,897 farm loans outstanding, representing a total investment of $18,262,401.21. (Ohio Building and Loan Association Report, 1914, p. xvi.) In other states they have only begun to adapt their methods to the needs of farmers. Whether they will succeed in promoting home ownership among the agricultural classes as they have among urban workers is a doubtful matter. But owing to the ease with which they can be formed, and the small expense incident to their management, they ought to become an important source of farm credit.—[G. E. Putnam, The Land Problem, Humanistic Studies, Vol. II, No. 2, University of Kansas, Lawrence, Kansas, 1916.]

(a) Explain one method by which stock of a building and loan association is sold to shareholders—including method of payment, class of securities issued, etc. (b) For what purposes are building and loan associations usually organized in large towns and cities? Do you regard them as an investment for the small saver? (c) Comment upon Putnam's statement regarding the building and loan association as a source of land credit. Is Putnam's idea different from the commonly accepted idea of the function of the building and loan association? (d) What are the economic functions of a building and loan association? (e) Why has there been such a steady increase in number of associations, membership, and resources, as shown by the table? Have they kept pace with the development of banking and business in this country since 1910? Why?

474. Valuation of Shares in Building and Loan Association

I. A building and loan association of the partnership plan issued a new series each year, as follows:

Series	Date of Issue	No. of Shares
1	Jan. 1, 1918	300
2	Jan. 1, 1919	400
3	Jan. 1, 1920	500
4	Jan. 1, 1921	300

The dues were $1 per month per share. The profits to the end of the fourth year were $4,200.

(a) Find the value of one share in each series at the end of the fourth year.

II. Withdrawal value. (a) If 20 shares of series 3 in the problem above are withdrawn October 1, 1922, what is their withdrawal value, assuming the association allows 5% interest on shares withdrawn before maturity?

Each share of the third series has a paid up value on October 1, 1922, of $21; hence the 20 shares are worth $420. To this amount add 5% interest for the equated time, 11 months, (21 + 1) ÷ 2, or $19.25, giving a withdrawal value of $439.25. The book value of each share of this series is $22.51 ($21 in each payment plus $1.51 profits as of July 1, 1922). Twenty shares at $22.51 gives a book value of $450.20. The difference, $10.95, is a profit on the transaction and makes the divisible profits for the half year $976.17 ($965.22 + $10.95).

(b) Find the withdrawal value of 10 shares of series 2, withdrawn December 1, 1922, interest allowed at 5%. [See Curtis and Cooper, Mathematics of Accounting, pp. 330-35.]

475. Advantages of the Building and Loan Association

(1) Each member has a voice in its management, and each participates in its advantages and profits.

(2) It furnishes the best method by which wage-earners and others with limited income can become their own capitalist.

(3) Building associations furnish a better and safer opportunity than any other plan that has ever been devised for securing a liberal return of profit from periodic savings of small sums.

(4) The industrial class, the store-keeper and manufacturers get practical instruction in the management of money and property in these institutions.

(5) One highly important feature of these associations lies in the fact that they enable their members to secure the use and benefit of their savings in advance by enabling them to borrow funds from the association with which to build or buy homes or embark in other enterprises. These loans they are privileged to repay in such periodic installments as their savings will permit. In some associations they are able to borrow money on straight loans, when that plan is preferred.

(6) The loan or credit that is thus extended to the workingman, to the wage-earner, the small merchant or manufacturer, is an important factor in the development of this country.—[Rosenthal, Cyclopedia of Building, Loan and Savings Associations, p. 36.]

(a) Explain how each of these alleged advantages is achieved, and comment on their reality.

476. General Withdrawal Rule in Constitution and By-Laws of Building and Loan Association

Members and special depositors whose stock or deposits are not pledged to this association may as a general rule, upon written application to the Secretary, withdraw all or any part of their stock, credits or deposits at any time without previous notice, but to protect the interest of depositors and borrowers and avoid sacrifice of securities notices of withdrawal may at any time be required and the liability to pay further dues, and the right to dividend on stock credits and interest on special deposits shall cease with any application to withdraw. All persons withdrawing shall be entitled to receive the amount of all credits at the time of the application to withdraw, less any member's share of the Association's loss in excess of the contingent fund. The required notices to withdraw shall be filed in the order in which they are received and paid from the regular receipts of the Association in the order in which they are filed as fast as 50% of the regular receipts of the Association will pay them; but the Board of Directors may, at its discretion, use all the regular receipts of the Association to pay withdrawals. All withdrawals shall be taken from the oldest deposits and no withdrawal from any one account or certificate shall exceed one thousand dollars in each thirty days ahead of other pending applications for withdrawals; but the Board of Directors may, at its discretion, pay withdrawals not exceeding $25 at one time, nor exceeding $100, within thirty days, regardless of the order of application.—[From specimen Constitution prepared by the Ohio Building Association League Committee.]

(a) Why are the terms and conditions of withdrawal highly important both to the association and to the members? (b) What are the objections to having the association borrow money, either from individuals or banks, in order to pay at once the equity of a member who wishes to withdraw? (c) "It is always a question worth considering as to whether the funds should be withdrawn from the association when shares mature." What is the problem? (d) Does the withdrawing member possess the right to claim a share of the undeclared profits of an association at the time of his application to withdraw, or simply his share of the profits credited and undrawn at the time of the last preceding declaration of dividends?

477. The Morris Plan Banks and the Usury Law

Connecticut Statutes, 1911, cap. 244, and 1915, cap. 143:

Be it enacted, etc. . . .

Section 1. No person, and no firm or corporation or agent thereof, other than a pawnbroker as provided in Chapter 235 of the Public Acts of 1905, shall, as guarantor or otherwise, directly or indirectly, loan money to any person and, directly or indirectly, charge, demand, accept or make any agreement to receive, therefor, interest at a greater rate than twelve per centum per annum.

Section 2. No person, and no firm or corporation or agent thereof, shall, with intent to evade the provisions of Section one, accept a note or notes for a greater amount than that actually loaned.

Section 3. No person, and no firm or corporation or agent thereof, shall charge a borrower with any expense of inquiry as to his financial responsibility or expense of negotiating a loan, or charge, at the time of making the loan, the expenses of collecting the interest and principal of the loan, unless the total of such charges and of the interest agreed upon shall be, during any year, twelve per centum of the loan or less.

Section 4. Any person who, individually or as a member of any firm, or as an officer of any corporation, or as an agent of any firm or corporation, shall violate any of the provisions of this act, shall be imprisoned for not more than six months, or fined not more than one thousand dollars, or both.

Section 6. The provisions of this act shall not affect any loan made prior to the passage of this act, nor any loan made by any national bank or any bank or trust company duly incorporated under the laws of this state or to any bona fide mortgage of real property exceeding the sum of five hundred dollars.

From a letter from a manager of a Morris Plan Bank:

The transaction has now reached the state where some means must be provided whereby the borrower can liquidate his loan at maturity. An extended and scientific study of the small loan business has demonstrated conclusively that a workingman, whose salary only allows a small margin in excess of the necessary expenditures, cannot meet short-time maturities or loans over a short period. It also has been demonstrated that unless required to set aside out of his weekly wages a certain amount with which to liquidate his loan at maturity he will, in a great majority of cases, consume all of his wages from week to week, and when the loan becomes due have no funds with which to repay same.

In order to meet this condition it is obvious that the Morris Plan must provide some safe investment which the borrower can purchase on a weekly instalment basis, and require the borrower to become an investor on this weekly instalment basis, so that out of his weekly wage the borrower can accumulate a sum which will be sufficient to retire the loan at maturity, if at that time the borrower has no other funds available.

To meet this condition each Morris Plan company has a rule that no loans are made to anyone except holders of the "C" investment certificates. . . . The borrower . . . is required to subscribe to one instalment investment certificate with a par value of fifty dollars for each fifty dollars borrowed, and by the contract of purchase agrees to pay to the Company on the "C" certificate one dollar per week for each certificate purchased or subscribed for. This contract of subscription is then assigned to the Morris Plan company as collateral for the loan and as a necessary protection to the two or more co-makers. The borrower then receives a loan less six per cent interest, deducted at the time of making the loan, and a fee of one dollar for each fifty dollars borrowed is also deducted, charged to contribute to the expense of investigating the loan. No fee, however, is allowed to exceed the sum of five dollars.

It will be seen therefore, that the loan has cost the borrower of $100 six dollars for interest and two dollars for the expense of investigation. Each week thereafter, for fifty consecutive weeks the borrower pays two dollars on the two instalment certificates..and at the expiration of fifty weeks has accumulated . . . one hundred dollars, and has completed the purchase of the two certificates. Two weeks thereafter his loan of one hundred dollars falls due, but he is not required to liquidate this loan with the two instalment certificates, but the option is given to him, if he so desires, to pay the loan from independent sources and convert his instalment certificates into full-paid certificates, which draw interest at five per cent per annum.

No interest is paid to the borrower upon the instalment payments made by him in the purchase of his "C" certificates, but when they become fully paid for he will then receive interest in excess of that paid by the savings bank or that of any other available institution.

It should be clearly borne in mind that the note evidencing the loan, having, as it does, at least three signers, and the contract of purchase for the "C" certificates, having never more than one, are necessarily separate and distinct contracts. Attention is called to the fact that one of these transactions is evidenced by a negotiable instrument and the other is an ordinary common law contract for the purchase of an investment. It is entirely optional with the borrower whether or not these two contracts remain separate and apart because he has the right to release the "C" certificates from hypothecation at the maturity of the loan by paying the amount of the loan, and receiving fully paid interest-bearing certificates equal to the amount of his instalment certificates purchased. If the borrower elects to do so, he may, however, avail himself of the option to pay the note at maturity with funds received from the liquidation of his investment certificates. Even in this event, the loan, evidenced by the negotiable note and the contract of subscription never become one and the same transaction. On the contrary, the funds received from one transaction are used to pay the obligation of the other. . . .

The maximum cost to the borrower under the Morris Plan, if we consider the loan transaction and the purchase of "C" certificate as one, is: (1) The original discount; (2) The loss of interest on the payments made on the "C" certificates; (3) The charge for investigating the loan. —[Letter from Milton P. Bradley of the Morris Plan Bank of New Haven, Conn.]

(a) Assuming that a borrower of $100 commences payments at the end of the first week, on the 6% basis calculate the cost of the loan as follows:

Weekly Payment No.	No. of Weeks Anticipated	Interest at 6% per Annum
1	51	$ 0.1176876
2	50	.1153800
3	49	.1130724
4	48	.1107648
..	..	.....
..	..	.....
48	3	.0092304

49	2	$ 0.0069228
50	1	.0046152
		3.0575720 interest on payments
		6.0000000 interest deducted in advance
		.3600000 interest on interest
		9.42 deducted in advance
		2.00 investigating fee
		$11.42 total charge for loan of $100

(a) Criticize this calculation. Is the loan usurious under the Connecticut law? under the law of your state? (b) What is the purpose of the separate contract for the purchase of "C" certificates? Is the purchase contract subject to the usury law as is the loan contract? Is this a device for the evasion of the usury law? Look up the following court decisions: North America, etc. Ass'n *v.* Sutton, 35 Pa. St. 463; Watkins *v.* Workingmen's Assn, 97 Pa. St. 514; Economy, etc. Assn. *v.* Hungerbuehler, 93 Pa. St. 258; Tilley *v.* American, etc. Assn, 52 Fed. Rep. 618; Seibel *v.* Victoria, etc. Assn, 43 Ohio St. 371; Reeve *v.* Ladies', etc. Assn, 56 Ark. 335. (c) May a lender charge such a fee as he deems fit for the preliminary investigation of the loan or for other services in connection with the loan? Look up the following citations: 39 Cyc. p. 981; 30 Conn., 175; 103 Ill., 365; 107 Ia., 297. (d) Explain the nature and purpose of the exemption of loans by national and state banks from the prohibition of usurious loans in the Connecticut statute.

478. Morris Plan Certificate as Investment

Morris Plan Certificates are secured in three ways.

First, by the capital and surplus of this company.

Second, by the CHARACTER behind its loans, the character of numberless borrowers. These Certificates are sold to provide money to loan. Rarely does a loss occur. The Washington Morris Plan Company loaned and collected $950,000 without the loss of a single cent. Instalments are coming due and being paid every day on loans so that there is always money to cash Certificates that may be surrendered, and there's the Capital and Surplus besides.

Third, by the character and the responsibility of the stockholders and directors of the Morris Plan Company. If you will consult the list of their names you will find that they are men of the highest business standing in the community.—[From a circular.]

(a) Are these certificates safer than a deposit account at a good savings bank or commercial bank? (b) On September 30, 1917, the

authorized capital of the 90 Morris Plan banks was $11,718,000; they made 1,051 loans in September, amounting to $2,406,312, averaging $150. The first bank was founded in 1910. Do these facts indicate financial strength behind the certificates?

479. How the Morris Plan Promotes Thrift

This is the way it is done:

You are going to become an investor. You decide whether you can spare $1 or $2 or more a week with which to start your fortune.

For every $1 a week you decide to invest you buy one $50 Instalment Certificate. You can buy as many as you want in denominations of $50.

You pay a dollar a week on each $50 Certificate.

At the end of twenty-five weeks the money you've paid in begins to earn 4% interest.

At the end of 50 weeks your Certificate is all paid for.

Then you can cash it here and buy a $50 full paid Investment Certificate, and get 5 per cent interest semi-annually.—[From a circular.]

(a) Is there anything in this plan more inducive to thrift than is a simple savings account at an ordinary bank?

480. What Morris Plan Loans Are Made For

Here are some of the things for which people of character, without giving chattel security or losing their self-respect, borrow money on easy terms, at legal rates of interest from Morris Plan Banks in all parts of the Country:

1. Accident.
2. New baby.
3. To pay up loan shark.
4. Sickness in family.
5. Death in family.
6. Clothing for children.
7. Clothing for parents.
8. To buy sewing machine.
9. To begin business.
10. To pay for education.
11. To begin housekeeping.
12. To help needy relatives.
13. To pay taxes or assessments.
14. To pay life insurance premiums.
15. To clean up old debts.
16. To make first payment on a lot.
17. To make repairs on home.
18. For a vacation trip.
19. Temporary loss of employment.
20. To take property out of pawn.
21. To discount bills.
22. To increase stocks of merchandise.
23. To purchase store equipment.
24. To purchase delivery equipment.—[From a circular.]

(a) How is the Morris Plan used to pay life insurance premiums? (b) How is the Morris Plan used by mercantile creditors to collect accounts? (c) Is the Morris Plan promotive of the installment plan of merchandising? (d) Are the Morris Plan Banks pawn-shops?

Are they banks of deposit? Do they conflict with existing banks? Are they a chain of banks? (e) How does it happen that Morris Plan banks are commonly sponsored by the business and industrial and social leaders of their respective cities?

481. The Industrial Finance Corporation of New York

There are 100 of them (the Morris Plan banks) in the United States operating under licenses from the parent body, the Industrial Finance Corporation, which owns the trade mark, the familiar black diamond, and holds the copyright on the distinctive forms used in the conduct of the business. At one time the parent body lent its financial assistance to new local banks but this is no longer necessary. The various banks organized under such license are financed by their capital stock, and by the sale of 5% certificates of investment which give to the local Morris Plan banks the capital with which they operate.—[Business Progress Bulletin, Alexander Hamilton Institute, June 27, 1925.]

(a) What are the functions of the Industrial Finance Corporation with respect to the Morris Plan banks? (b) Does the Corporation own a controlling, or any, interest in the local Morris Plan banks?

CHAPTER XIX

AGRICULTURAL CREDIT

482. Security Behind Real Estate Bonds

(1) Should a fairly fixed percentage be allowed for builder's profits and architect's fee, or should it vary in accordance with actual cost in each individual case? If the former principle is accepted, should the percentage vary in accordance with the size of the project and where should the divisions be made?

(2) Should a special value be set up where unusual engineering or consulting fees are involved?

(3) For how long a period of time is it reasonable to allow carrying and management costs to enter into value? Obviously too great an allowance is a reflection on the management. Can a percentage range be established and a range of time periods be set up for different types of buildings?

(4) Can a percentage range be set up to govern financing cost which makes due allowance for interest rates, amortization provisions, bonuses, discounts, etc., that covers a fair minimum and maximum?

(5) Where, through rental surveys, etc., the income of a building can be forecast, how far should such assured income enter into increasing the value? Obviously, profitableness determines the value of income-producing properties, but how far should this factor enter into prospective building appraisals?

(6) Where special construction hazards involving additional costs are involved, how far should they be considered as giving added value? Reference is made to such hazards as embargoes on delivery of materials that add to costs, special labor situations, unusual and dangerous kinds of excavating, erection, construction, etc. . . .

The elements of value which should be taken into consideration in appraising a building to be erected, and on which financing is to be effected.

I. Value of Direct Construction Costs.
   - A. Cube plan.
   - B. Detail plan.

II. Value of Indirect Construction Costs.
   - A. Builder's profit.
   - B. Architect's fee.
   - C. Engineer's fee.
   - D. Carrying charges during construction incidental to land purchase.
     1. Legal.
     2. Title.
     3. Insurance.
     4. Administration including investigations, surveys, researches, appraisals, etc.

5. Taxes.
6. Interest actually paid out or lost.
   a. Mortgages.
   b. Cash equity.

E. Carrying charges during construction incidental to building.
1. Insurance such as fire, liability, bond, etc.
2. Taxes.
3. Legal.
4. Interest on cash or loans as required.
5. Administration including investigations, appraisals, surveys, researches, etc.

F. Special Consultation Costs such as Building Planning Service, etc.

III. Value of Management Cost during Formulative Period.

A. Loss before sufficient tenants can be secured to put building on the basis of a going business, viz., a successfully operating project.
1. Administration.
2. Interest on property representing unoccupied or "inducement" space.
3. Leasing costs.
4. Advertising and promotion costs.
5. Maintenance costs.

IV. Value of Financing Costs.

A. The cost of getting mortgage money.
1. Bonus.
2. Financing fee.
3. Financing discount.
4. Underwriting discount.

V. Value of Earnings Actual or Prospective.

VI. Value of Special Hazards.—[Report of Committee of Investment Bankers Association of America 1926.]

(a) Answer each of the questions above. (b) What principles of valuation are evident in the list of "elements"? Are they consistent?

483. Farm Credit in North Carolina

The North Carolina Department of Agriculture in conjunction with representatives of the United States Department of Agriculture made a survey of 800 farms and published their results in May 1923. The conclusions reached by these investigators are in part as follows:

The farm mortgage situation is better than that for other kinds of credit and, furthermore, seems to be steadily improving. The Federal Land Bank of Columbia, S. C., is gradually taking over land mortgage loans needed for longer periods of time, and in addition, out-of-state financial institutions are now offering such loans at reasonable rates.

Credit advances for current expenses are those in which the greatest

room for improvement exists. By far the larger part of such advances are obtained through the purchase of supplies on time, a practice which has long been recognized as extremely costly. The following table summarizes figures regarding the part played by all sources for short-term credit advances.

PERCENTAGE OF TOTAL SHORT-TERM CREDIT OBTAINED FROM DIFFERENT SOURCES IN SELECTED AREAS OF NORTH CAROLINA, 1921

	All Sources	Banks	Landlords	Other Individuals	Factories and Agents	Stores	All Others
	%	%	%	%	%	%	%
All Areas	100	15.6	11.7	7.6	14.0	50.3	0.8
Wake Co.	100	15.5	9.1	7.2	10.6	56.2	1.4
Allegheny Co.	100	40.1	1.2	32.0	.....	26.7	.....
Scotland Co.	100	9.4	18.6	1.8	23.4	46.8	.....

Stores apparently handle more of such business than all other agencies combined, while banks carry less than one-sixth of the total. A large proportion of the credit is supplied by fertilizer factories and their local agents, through the sale of fertilizer to farmers on time.

AVERAGE INTEREST RATE CHARGED FOR ADVANCES OF ALL TYPES AND FROM SELECTED SOURCES IN SELECTED AREAS OF NORTH CAROLINA, 1921

	All Areas	Wake County Area	Allegheny County Area	Scotland County Area
	%	%	%	%
All Loans	11.3	10.6	8.4	18.3
Mortgage loans	6.1	6.2	6.0	6.0
Short-term cash loans	6.3	6.3	6.0	6.9
From banks	6.2	6.3	6.0	6.1
Time purchase	22.3	25.1	23.6	20.2
Stores	26.6	26.3	23.6	34.3
Tenant from landlord	21.5	24.0	....	19.1
Manufacturer	14.2	17.4	....	13.3

Many ask for credit from stores out of habit and do not realize how high the charges are. There are others, however, who cannot obtain credit from banks. This is often due to the fact that no contact has been established and the farmer's credit rating has not been determined. Such cases must, of course, be considered separately from those in which farmers are known to be poor risks.

Banks throughout the areas surveyed seemed to prefer character and general ability over any tangible security in making loans.

PERCENTAGE DISTRIBUTION ACCORDING TO SECURITY DEMANDED BY VARIOUS AGENCIES IN ALL FORMS OF SHORT-TERM LOANS IN SELECTED AREAS OF NORTH CAROLINA, 1921

	Total	Open Acc't and Personal Note	Endorsed Note	Chattel Mtge.	Crop Lien	Stocks, Bonds, etc.	Combined Crop & Chattel
	%	%	%	%	%	%	%
All sources	100	48.1	12.0	2.1	26.4	0.6	10.8
Banks	100	49.8	45.8	1.7	0.6	2.1	.....
Landlords	100	7.9	.....	2.9	82.0	.....	7.2
Other individuals	100	61.1	29.6	5.4	3.9	.....	.....
Factories and agents	100	41.8	14.1	0.8	41.7	.....	1.6
Stores	100	57.2	1.1	1.3	21.0	.....	19.4
All others	100	18.9	.....	37.5	.....	43.6	.....

[Farm Credit in North Carolina, by F. R. Yoder, H. S. Beardsley and A. J. Honeycutt, North Carolina Dept. of Agriculture Bulletin, Raleigh, May 1923, pp. 25-27.]

(a) How do you account for the wide use made of merchant credit? Why do not the borrowers secure these funds from their local banks? (b) What would be the effect upon their costs and profits if local banks should provide the funds? (c) How do you explain the great differences in the interest rate paid for mortgage and short-term cash loans as compared with that on time purchases? (d) Outline the work which could be done by a well-organized credit department in making loans to this type of borrower.

484. Operation of Federal Intermediate Credit Banks

The operations of the Federal intermediate credit banks have become nation-wide in scope. During the year 1925 these banks loaned to cooperative marketing associations $124,174,009.77. Rediscounts for banks and eligible credit corporations and loan companies totaled $53,458,931.17. Partial payments were accepted and renewals granted where the need existed and the security warranted.

The interest rate on direct loans to cooperative marketing associations continued at 4½ per cent per annum until early in November, when, due to the condition of the debenture market, the rate was increased to 5 per cent. The rate on rediscounts was 5 per cent throughout the year.

Federal intermediate credit banks do not make loans direct to individuals but assist in financing sound cooperative marketing associations and furnish discount facilities for State and National banks and properly organized agricultural credit corporations and livestock loan companies. Loans or discounts must have a maturity at the time they are made or continued by a Federal intermediate credit bank of not less than six months nor more than three years. There is no rule as to the number of times a properly secured note may be renewed. Borrowing and discounting agencies have preferred loans and discounts having a maturity of not to

exceed 12 months, with the understanding that proper renewals will be granted.—[Ninth Annual Report of Federal Farm Loan Board, 1925, pp. 8-9.]

(a) How many federal intermediate credit banks are there? Where are they located? When were they established? (b) Wherein do the functions of the intermediate credit banks differ from those of the federal land banks? (c) Why are these banks not permitted to lend directly to individuals? (d) What is the maximum limit set on the maturity of these loans by the Agricultural Credits Act of 1923? How does that period compare with the rulings of the Farm Loan Board?

485. The Federal Intermediate Credit Bank System—The Financial Statement

CONSOLIDATED STATEMENT OF CONDITION OF THE TWELVE FEDERAL INTERMEDIATE CREDIT BANKS AS OF THE CLOSE OF BUSINESS, May 31, 1926

(000 omitted)

ASSETS	
Direct Loans	$ 36,791
Rediscounts	41,762
Accrued Interest on Loans and Rediscounts	311
U. S. Government Bonds and Securities	1,578
Accrued Interest on U. S. Government Bonds and Securities	15
Other Securities	1,980
Accrued Interest on Other Securities	1
Other Accrued Interest	.....
Rediscounts for Other Federal Intermediate Credit Banks	.....
Cash on Hand and in Banks	6,014
Capital Stock Callable from U. S. Treasury	36,000
Furniture and Fixtures	21
Documentary Stamps	.....
Other Assets	44
TOTAL ASSETS	$124,522
LIABILITIES	
Capital Stock Subscribed	$ 60,000
Surplus	1,189
Undivided Profits	592
Other Reserves	15
Reserved for Matured Debentures	25
Reserved for Depreciation and Losses	170
Debentures Outstanding	58,525
Accrued Interest on Debentures Outstanding	497
Notes and Bills Payable	1,475
Notes and Bills Rediscounted	100
Bonds and Securities Borrowed	.....
Deferred Rediscounts	1,174
Interest Collected Not Earned	534
Cash Capital Rediscount Agencies	148
Other Accrued Interest	1
Reserved for Dividends Unpaid	.....
Other Liabilities	77
TOTAL LIABILITIES	$124,522

(a) What are the four chief types of asset? What percentage of the total assets does each type constitute? (b) To whom are the "direct loans" made, and upon what security? (c) What is the meaning of "rediscounts" when listed among "assets"? Trace the course of these rediscounts. What legal restrictions are laid as to the quality and amount of these "rediscounts"? (d) Explain "capital stock callable from U. S. Treasury." Differentiate it from "capital stock subscribed" as found among the "liabilities." Is the former item to be a permanent asset? Of the total assets what percentage has been contributed by the United States? (e) Against what items among "liabilities" should a cash reserve be kept? What is the ratio of the "cash on hand and in banks" to the "debentures outstanding"? (f) Differentiate between "debentures outstanding" and "notes and bills payable." What is the occasion for the issue of each? (g) Distinguish between "rediscounts" among the "assets" and "notes and bills rediscounted" among the "liabilities." (h) Explain "deferred rediscounts" and what it indicates as to management and policy of the system. (i) Explain "cash capital rediscount agencies." What are these agencies?

486. Interpretation of the Provisions of the Federal Farm Loan Act With Respect to Loans

(a) May a borrower from a federal or joint-stock land bank at the end of five years from date of his mortgage or on any regular installment date, make *in advance* installment payments on account of principal? (b) What action would follow if a borrower were to use the proceeds of his loan for a purpose (1) other than that specified in his application, or (2) other than agricultural according to definition in the law? (c) May a federal land bank make loans on one tract of land for use on another tract of land? (d) May a farmer become a member of more than one national farm loan association and borrow from each (1) on the same piece of land, (2) on different pieces of land, (3) to any amount if he has a sufficient number of pieces of qualifying land? (e) Is the use of land for orchards an agricultural use under the law? What limitation as to period of loan on orchard land would be necessary? (f) Must the entire tract under mortgage be under cultivation in order to qualify for a loan? (g) If loans are made to provide funds for permanent insurable improvements, should the bank anticipate in its appraisal of the land the enhanced value of the farm due to such improvements? (h) Should it be the general policy of the Federal Farm Loan Board to interpret the law strictly or loosely in favor of borrowing farmers?

487. Farmers Acquire Another Land Bank

Washington, D. C., September 15, 1926. The farmer-borrowers in the sixth Federal Land Bank District, covering the states of Illinois, Missouri and Arkansas, now own through their National Farm Loan Associations all of the stock of the Federal Land Bank of St. Louis, having recently acquired the last of the stock of that institution held by the U. S. Treasury, announced A. C. Williams, Federal Farm Loan Commissioner, . . . This is in accord with the Act of Congress creating the twelve Federal Land Banks comprising the system. The Treasury Department made practically all of the initial investment to get these banks started but the law provided that as borrowers joined the local National Farm Loan Associations, they were to take stock in the association in an amount equal to 5 per cent of their loan, this to be in turn used to purchase stock in the Federal Land Bank of the district. The farmer-borrowers have in this way already acquired all of the stock held by the Treasury Department in eight of the twelve Federal Land Banks. The total stock held by the Government in the remaining four banks is only a little over $1,000,000 compared to nearly 9,000,000 in the twelve banks when they were established in 1916. The total capital owned by the farmers in the twelve banks now exceeds $56,000,000.—[Farm Loan Bureau, U. S. Treasury Department.]

(a) While the government controlled the stock of the federal land banks who controlled the boards of directors and the operation and policy of the respective banks? Was this arrangement safe for the government? (b) Why did the farmers in some districts acquire their federal land banks before those in others? In what districts are the capital stocks still owned partly by the government? How do the loans of these banks compare with the loans of the banks owned by the borrowing farmers? (c) When the farmers acquire ownership of the federal land banks is the system of supervision changed? Are land appraisals less carefully made and loans more readily procured? (d) Why did the government subscribe to the stock in the first place? What is the plan of the federal intermediate credit banks in respect to stock ownership by the government and by the borrowers?

488. Maximum Loan to a Borrower Under Federal Farm Loan System

Farm loans by a joint-stock land bank to a single borrower in excess of 15% of its capital and surplus will not be approved as security for bond issues.

If farm loans to a single borrower by banks in the farm loan system exceed $50,000, the Board will not permit bonds to issue for any excess over the $50,000.

(a) Which of these restrictions is the more severe? How does the purpose of the first differ from that of the second? (b) Is the restriction on loans by a national farm loan association and federal

land bank comparable with the above (former) restriction on joint stock land bank? (c) Is the refusal of the Farm Loan Board to consider excessive loans as security for bond issue sufficient to prevent such loans being made?

489. Handicaps in Farm Mortgage Loans before 1916

The volume of farm mortgages outstanding on the farms in the United States was, according to the Census in 1920, four billion dollars, or 6% of the value of the farms. The mortgages were distributed as follows:

Owned by insurance companies	$1,000,000,000
" " savings banks, trust companies and local banks	1,000,000,000
" " eleemosynary institutions, endowments, etc.	300,000,000
Negotiated for private parties	250,000,000
Local loans, including real estate contracts, second mortgages, etc	1,450,000,000

The average life of the loan was four years. The commissions and expenses involved annually in placing the new loans and renewals were estimated at $50,000,000. The number of dealers in farm mortgages approximated 6,000, including brokers, lawyers, and others who placed loans on real estate, but few had financial integrity and standing such as warranted public confidence. The local banker had no market for his mortgages that had adequate organization to reach city lenders. The mortgage investor had no one to investigate the borrower or the mortgage dealer, or to collect interest payments and to preserve the security back of the mortgage. The unit of the mortgage was not in a denomination that fitted the investors' needs. Provisions did not exist for part-payments of the principal by the borrower. The supply of capital was chronically inadequate for the farmers.

(a) Show how the Federal Farm Loan System proposed to change this situation in each particular.

490. Federal Intermediate Credit Bank Debentures

The following list embraces the chief characteristics of the federal intermediate credit debentures.

Issued By:	Federal Intermediate Credit Banks
Obligation Of:	All 12 banks, jointly and severally
Security:	Agricultural and livestock bankable paper
Capital Stock of Banks:	$60,000,000
Capital Stock Owned By:	United States Government
Banks Examined By:	Farm Loan Board
Maturity of Debentures:	Not more than five years
Maturity of Collateral:	Six months to three years
Debentures Prepared By:	United States Treasury Department

Debentures Issue Limit: Ten times paid-in capital and surplus
Exempt from Federal, State, Municipal and Local Taxation except Estate and Inheritance Taxes

(a) Compare their safety with that of the United States certificates of indebtedness. (b) On what occasions would a national bank invest funds in this type of security? (c) Compare the yield of a late issue of these debentures with the yield on federal farm loan bonds and with the yield on United States certificates of indebtedness.

491. Rediscount at the Federal Intermediate Credit Banks

The federal intermediate credit banks were provided for by the Agricultural Credit Act of March 1923. Since they were organized they have been used extensively for rediscounting paper by certain institutions, agricultural credit corporations and livestock loan companies, though the total amount of credit is small in comparison to the amount needed in the agricultural field in which they are supposed to function. The following table has been prepared from the annual reports of the Federal Farm Loan Board as of the close of each year from 1923 to 1926 inclusive to show the volume of rediscounts:

REDISCOUNTS OF FEDERAL INTERMEDIATE CREDIT BANKS
(000 omitted)

Dec. 31	National Banks	State Banks	Agricultural Credit Corporations	Live Stock Loan Companies	Saving Banks, Trust Companies	Repayments	Rediscounts Outstanding
	$	$	$	$	$	$	$
1923[1].....	97	1,[illegible]	4,191	3,819	219	306	9,105
1924.....	27	812	9,[illegible]	7,[illegible]	169	24,002	18,760
1925.....	34	397	15,371	10,390	80	69,949	26,272

[1] Rediscounts of $67,022.55 for cooperative associations not included for this year.

(a) What are agricultural credit corporations? (b) What kind of financing do the agricultural credit corporations do? (c) Under what conditions can national and state banks rediscount at a federal intermediate credit bank? (d) Explain the decline in the volume rediscounted by state banks? (e) Can federal intermediate credit banks rediscount paper with a federal reserve bank? Explain.

492. Amortization Tables for Federal Farm Loan System

Paragraph 12 of section 3 of the original Farm Loan Act:

The Federal Farm Loan Board shall prepare and publish amortization tables which shall be used by national farm loan associations and land banks organized under this act.

The Board has prepared amortization tables (see Circular No. 17, March, 1924) after the following form:

Loan of $100 at 5½% interest repayable in 34½ years by means of a semi-annual installment of $3.25, which includes interest and part of the principal.

Payment No.	Installment	Interest	Applied on Principal	Principal Still Unpaid
1	$3.25000	$2.75000	$0.50000	$99.50000
2	3.25000	2.73625	.51375	98.98625
3	3.25000	2.72212	.52788	98.45837
4	3.25000	2.70760	.54240	97.91597
5	3.25000	2.69268	.55732	97.35865
		(Intervening years omitted)		
67	3.25000	0.25377	2.99623	6.23205
68	3.25000	0.17138	3.07862	3.15343
69	3.24014	0.08671	3.15343	0.00000

(a) Suppose a borrower wanted a loan of $10,000, what would be his semi-annual installment? (b) Devise the formula by which this table was prepared.

493. National Farm Loan Associations

The following table has been compiled from the various reports of the Federal Farm Loan Board to show the number of associations organized and the volume of business transacted:

Number of national farm loan associations chartered and canceled, together with the number, total amount, and average of loans made in each state through the federal land banks from organization of the system to December 31, 1926:

Dec. 31 Year	Number of Associations Chartered	Number of Charters Canceled	Number of Loans Made	Total Amount Loaned	Average Loan Made
				$	$
1916	.....	.....	.....	.....	.....
1917	1,839	.....	.....	29,824,655	.....
1918	3,439	74	64,357	149,004,439	2,291
1919	4,018	128	106,929	282,007,781	2,637
1920	4,139	173	131,395	369,242,464	2,810
1921	4,316	208	153,977	441,859,940	2,880
1922	4,720	233	232,543	684,407,289	2,943
1923	4,831	241	292,643	876,490,304	2,995
1924	4,903	260	339,970	1,042,001,148	3,065
1925	4,925	268	379,875	1,169,356,599	3,078
1926	4,942	277	416,768	1,300,674,314	3,121

[Source: Annual Reports, Federal Farm Loan Board.]

(a) What is a national farm loan association? How is one organized? Who may be members? (b) How is the amount of its capital stock determined and how obtained? (c) To what extent, if at all, do these associations investigate the credit standing of their members?

494. Making a Market for Farm Loan Bonds

On April 13, 1921, Senator Fletcher introduced the following bill in the United States Senate to extend the rediscount privileges of member banks to farm loan bonds:

A Bill to extend rediscount privilege to farm loan bonds, promote their sale and for other purposes:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That any bank of the Federal Reserve System may buy or sell farm loan bonds; any member bank of said system may accept time drafts against a deposit of such bonds as security; acceptances of a member bank thus made, or the direct obligation of such bank, maturing within sixty days, when accompanied by farm loan bonds as collateral security not less in face value than the amount of such direct obligation, shall be eligible for discount by a Federal reserve bank.—[67th Congress, 1st Session, 1921, S.620.]

(a) Criticize the idea of making farm loan bonds eligible for rediscount at the federal reserve banks. (b) If we admit farm loan bonds, would it be logical or wise to extend the same privileges to bonds issued by the manufacturer of agricultural implements, the producer of iron and steel? (c) Criticize the idea of advocating that member banks accept such bonds. Is it a violation of the principle underlying acceptance credits? (d) What effect would the passage of such a bill have upon the portfolio of the federal reserve banks?

495. National Farm Loan Associations

I. Restrictions on Officers. According to the philosophy and purpose of the Federal Farm Loan System,

(a) Should members of the board of directors be eligible to serve on loan committees? (b) Should the secretary-treasurer be a member of the association? (c) If the secretary-treasurer be a member of the association, should he be eligible to serve on the loan committee? (d) Should the Farm Loan Board fix the maximum salary allowed to secretaries-treasurers of the associations? (e) Should the members of the loan committee serve without compensation?

II. Territory Covered. Justify the following regulation of the Federal Farm Loan Board:

No farm loan association may operate in territory covering any part of two States. In defining the territory within which an association will do

business said territory must be entirely within the boundary of a single State, but the overlapping of territories of different national farm loan associations is permissible when confined within State lines. No monopoly of territory will be allowed.

III. Consolidation of National Farm Loan Associations.

(a) What has been the course, from year to year, of the number of national farm loan associations in operation? (b) Given two or more associations operating in territory which can be covered legally by one association and desiring to *consolidate* into one association, the non-liquidating association receives the assets and assumes the liabilities of the liquidating association. In this process, (1) Is the name of either association kept? (2) What majority of the members of the liquidating association must assent to the liquidation? (3) What becomes of the stock of the federal land bank which the liquidating association owned? of the stock of the liquidating association? (4) How is the contingent liability of the liquidating association as indorser of the mortgages handled?

496. Interpretation of Eligibility of Applicant for Loan

Under the Federal Farm Loan Act loans are to be confined to farmers who are "actually engaged or soon to become engaged in the cultivation of the land mortgaged."

(a) Suppose the land is being cultivated by someone else, does it make any difference whether he is tenant or servant? (b) If an applicant lives in town and runs a store but owns a farm in the vicinity of the town, is it necessary that his principal vocation and his principal income be derived from agriculture? (c) Suppose a mortgage is put on one piece of land for the purpose of purchasing more agricultural land, may the latter be purchased for speculation or for rental?

497. Membership in a National Farm Loan Association

In the light of the philosophy and purpose of the Federal Farm Loan System, how would you expect the Federal Farm Loan Board to interpret the provisions of the act with respect to membership in national farm loan associations, specifically:

(a) Which determines the right of membership, the location of the land to be mortgaged or the residence of the applicant? (b) If the farm to be mortgaged lies within the territory of two or more chartered associations, is the applicant eligible to join either? (c) If the land to be mortgaged is not contiguous, will it be treated as one farm? (d) If the land to be mortgaged is divided by a state line, must the applicant join an association in each state and take out separate mortgages? (e) Are guardians, executors, administrators, and

trustees ever permitted to be members? (f) If state laws do not restrict the right of aliens to hold and convey real estate, are aliens eligible to membership? (g) Is the following definition of *actual farmer* satisfactory: "One who conducts the farm and directs its entire operation, cultivating it with his own hands or by means of hired labor." (h) In case of foreclosure and sale of mortgaged land, what disposition should be made of the borrower's stock in the national farm loan association? (i) In case of partners and joint owners, and husband and wife as joint owners, how should membership be adjusted?

498. Location of Securities under Federal Farm Loan System

(a) What is the function of the registrar? (b) How and where are the notes and mortgages held as collateral for farm loan bonds? (c) As a protection to the pledgor should he have joint access to the safes containing cash and securities, title to which passes by delivery? (d) Should the cash and securities, title to which passes by delivery, pledged by the land banks be commingled, or should the pledgee hold in separate safe-deposit box the pledges of each pledgor?

499. Profits of a National Farm Loan Association

The only source of profit of an Association is its dividends from stock in the Land Bank. Whenever a farmer subscribes for five per cent of his loan in stock of the Association, the Association must in turn subscribe for a like amount of stock of the Land Bank. This stock is held as collateral to loans but the dividends are paid to the Association. The Land Bank is allowed under the law a maximum of one per cent (1%) profit on its loans. [From a circular.]

(a) If this be the only source of profit, how are the expenses of a national farm loan association met before it has profits, or at least enough profits to pay its way? Are there any provisions of law for this situation?

500. Crop-Moving Deposits

In my annual report for the fiscal year 1913, reference was made to deposits by the department in banks in the agricultural States for the purpose of assisting in the movement of crops. I am now able to report that the full amount of money so deposited for crop-moving purposes in the fiscal year 1914 in the Southern, Western, and Pacific States was $37,386,000 out of $46,500,000 which was allotted to them. The money was returned in four installments, as follows:

On or before—	
January 14, 1914	$ 7,955,641.66
February 15	9,830,184.47
March 15	10,512,103.74
April 1	9,088,070.13
Total	$37,386,000.00

From the above deposits the Government received $267,844.51 in interest.

In order to determine to what extent, if any, assistance would be required by the banks for crop moving and marketing and for other purposes during the autumn of 1914, a letter was sent to each national bank in the country on June 29, enclosing a blank form upon which an expression of views of each bank was requested.

Many banks in the Eastern and Pacific States replied that they would not need government funds, but, acting on the replies from banks which expressed a wish for such deposits, the following allotments were made:

Southern States	$23,500,000
Western States	13,475,000
Pacific States	350,000
Total	$37,325,000

These funds were distributed in installments of 25 per cent each, the amount distributed to October 31, 1914, being $19,446,246.—[Annual Report of the Secretary of the Treasury, 1914, pp. 25-26.]

(a) Was this a common practice? (b) What was the immediate cause for such a transfer of funds? The underlying causes which brought about such a situation? (c) Was this action related in any way to politics? Explain. (d) Was the government justified in placing public funds at the disposal of certain banks to be used to finance private business enterprises?

501. Agents of Joint-Stock Land Banks

Joint-stock land banks may pay reasonable commissions to agents or other persons or to corporations who procure applications for them, but such commissions shall not be charged to the borrowers and must be treated as operating expense.

(a) Why are these banks not allowed to charge the commissions to the borrowers? (b) If such agent enters upon negotiations contrary to the law in procuring applications or closing loans, is the bank responsible?

502. Purposes of Loans of Farm Loan System

The system, according to the title of the Farm Loan Act, is designed "to provide capital for agricultural development."

(a) What specific purposes of loans by a federal land bank are named in the act? How do these purposes compare with the purposes for which joint stock land banks may make loans? Explain the reasons for the differences. (b) Will the Board approve loans by a joint-stock land bank for purpose of land speculation or for other purposes entirely foreign to agricultural production?

503. Expense of New Loans by Federal Land Banks and Joint-Stock Land Banks

The regulations of the Farm Loan Board are that the expense of new loans may be charged as a current operating expense or it may be distributed over a period of five years, charging off one-tenth at the end of each semi-annual period, provided that the total amount of expense thus deferred shall not exceed 1½% of the amount of new loans.

(a) Why may these expenses not be charged at once to the borrower? (b) Why is the distribution period of deferring the expense fixed at five years? (c) Why should the total maximum amount of such deferred expense be restricted to 1½%?

504. Loan Provisions of Federal Farm Loan Act

Interpreting the loan provisions of the Federal Farm Loan Act: (a) If two heirs own an undivided interest in a farm is it possible for them to procure more loans on the farm than if their interests be legally divided? (b) If a farm mortgaged to secure a loan had, at the time the loan was made, ten acres of good standing timber and if, as soon as the loan was received, the farmer were to cut and sell the timber, what action by the bank would follow? (c) Does the bank require an abstracted title on land on which mortgages are put to secure loans? Who pays the cost of searching land titles, the borrower or lender? (d) When a land bank in satisfaction of mortgage debts acquires land which it enters among its assets, who determines its proper value for such entry? Is there here any chance for hiding losses? (e) If any installment payment on any mortgage pledged with any farm loan registrar as security for an issue of farm loan bonds is not paid when due, how is the security of the bonds protected?

505. Provision Against Promotion of Joint-Stock Land Banks

The Farm Loan Board will refuse to approve any application for the organization of a joint-stock land bank which contemplates or provides for any promotion fee, or which proposes to set apart or apply any part of the money collected from subscribers for the payment of promoters' fees for the sale of stock or for services in starting and opening any such bank, whether provided for by contract with the proposed bank or by contract with the subscribers to the stock of the proposed bank.

(a) What is the purpose of such a regulation? (b) Does a similar provision of law or of regulation by the Comptroller of the Currency hold with respect to the promotion of national banks?

506. Partial Release of Mortgage Security by Federal or Joint-Stock Land Banks

The regulations of the Farm Loan Board provide that a partial release of mortgage security may be made at any time if justice to the borrower demands and the unreleased portion of the security is ample.

(a) Specify some conditions under which such releases are just to the borrower. (b) When such release is made why should the following be insisted upon: (1) approval by explicit resolution of the board of directors of the farm loan association indorsers; (2) formal notice of such release to the registrar; (3) indorsement of the release on the mortgage itself; (4) report of the release to the Farm Loan Board?

507. Investment of Legal Reserve of Federal and Joint-Stock Land Banks and National Farm Loan Associations

The amount of reserves of Federal and joint-stock land banks required by law shall be held in cash on hand or deposited subject to check in member banks of the Federal Reserve System, or they may be invested in obligations of the Government of the United States, intermediate credit bank debentures, and bankers' acceptances eligible for rediscount under section 13 of the Federal Reserve Act. Provided, That one-half of the legal reserve may be invested in eligible farm mortgages; and Provided further, That any bank which sets up a reserve for the entire book value of all real estate at the time it is acquired or charges off all real estate as acquired, may invest its legal reserve in mortgages eligible for bond security under the Farm Loan Act.

The reserves of national farm loan associations shall be held in cash deposited subject to check in member banks of the Federal Reserve System, or may be invested in Federal farm loan bonds, or obligations of the Government of the United States.

(a) If the reserves be invested as permitted, is there propriety in calling them reserves? (b) Criticize the qualifications of each type of permitted investment for serving as reserve. (c) Why should differences be drawn in the investments permitted to the land banks and the loan associations? (d) Is permitting a land bank to buy acceptances a justifiable commingling of commercial and financial banking? (e) What are the motives in limiting the depository right to members of the Federal Reserve System? (f) Why should a bank which takes the special accounting precautions for its acquired real estate be permitted to invest its reserve in mortgages?

508. Securing Funds for Federal Land Banks

On October 15, 1923, a group of investment bankers announced an offering of federal land bank bonds. The announcement read in part as follows:

Exempt from Federal, State Municipal and Local Taxation
$47,000,000
Ten-Thirty year
Federal Land Bank 4¾ Bonds
Dated July 1, 1923 Due July 1, 1953.
Not redeemable before July 1, 1933.

Interest payable January 1 and July 1 at any Federal Land Bank or Federal Reserve Bank. Principal payable at the bank of issue. Coupon and registered bonds (interchangeable) in denominations of $10,000, $5,000, $1,000, $500, $100, and $40. Redeemable at par and interest at any time after ten years from date of issue. Proceeds of the bonds will be used for agricultural purposes in compliance with legislation which put the Federal Land Bank into existence.

Price 100% and interest, to yield 4¾%

(a) By what authority was this bond issue brought out? (b) Outline the procedure for issuing these bonds. (c) Explain in detail how and under what conditions these funds can be borrowed by individual borrowers, including in the latter half of your answer the principal features regarding who may borrow, length of time for which loans will be made, the security required, method of retiring the loan, and the rate of interest to borrower. (d) How was the interest rate determined for these bonds? How is the maximum rate determined for such bonds? (e) For what purpose may farmers use these funds after they are obtained? (f) Why are federal land bank bonds tax-exempt?

509. Legal Restrictions on Real Estate Loans

THE FIRST CITY NATIONAL BANK OF KANSAS CITY
September 15, 1926

ASSETS		LIABILITIES	
Cash	$ 1,200,000	Capital	$ 2,400,000
Exchange for clearing	600,000	Surplus	600,000
Due from Fed. Res. Bank	1,200,000	Deposits:	
Bonds	1,800,000	Time	2,400,000
Loans and discounts	8,400,000	Demand	7,200,000
		Notes	600,000
	$13,200,000		$13,200,000

(a) Which of the following loans can this bank legally grant? Why?

(1) A loan of $6,000 to H. C. Smith of St. Louis, secured by city real estate which was located in St. Louis and valued at $25,000.

(2) A loan of $7,500 to H. P. Green of Denver, secured by city real estate located in Denver and valued at $20,000.

(3) A loan of $6,000 to John Smith of Kansas City, secured by a mortgage on real estate in Kansas City. The real estate was appraised and valued at $9,900.

(4) A loan of $5,000 to Tom Johnson of Kansas City, secured by a second mortgage on real estate located in Kansas City. The appraised value of the city real estate was $120,000 and the first mortgage was for $40,000.

(5) A loan of $6,000 to John Smith. The note was dated June 15, 1926 and was due January 1, 1928. The collateral offered was a first mortgage on real estate located in Kansas City and valued at $15,000.

(6) A loan to a farmer, who lived within six miles of Kansas City, for $2,000, dated June 15, 1926 and payable on June 15, 1928. The loan was secured by farm lands valued at $10,000.

(7) A loan to a farmer, who lived within ten miles of Kansas City, for $12,000, dated June 15, 1926 and payable June 15, 1928. The loan was secured by farm land valued at $20,000.

(b) Which of the loans were made possible by the Pepper-McFadden Act of 1927?

510. Insurance Required on the Security of the Loans by the Federal or Joint-Stock Land Banks

Regulations of the Farm Loan Board provide that where a part of the loan is made upon permanent improvements, as permitted by section 12 of the Farm Loan Act, said improvements shall be insured by a reputable insurance company for not less than 60% of the appraised value thereof.

(a) Is insurance to 60% of the appraised value sufficient? (b) What proportion of a loan may be made upon permanent improvements? (c) Are policies of a farmers' mutual insurance company satisfactory for this purpose?

511. Paper of Cooperative Marketing Associations

A grower's draft on an association not a trade acceptance. A draft drawn by a grower on an association to which he has delivered his crop, accepted by the association, and discounted by the grower, at his bank is not, however, a *trade acceptance* within the meaning of the board's regulations. —[A Ruling of the Federal Reserve Board.]

(a) Explain why this is not a trade acceptance. (b) Show the conditions under which such paper would be eligible for rediscount at the federal reserve bank. (c) Explain, "If the growers use the

proceeds for *agricultural purposes.*" Differentiate between "agricultural uses" and "commercial uses." (d) Would the following be classified as agricultural paper: (1) A note of a corporation or association engaged in performing services in connection with packing and marketing agricultural products not grown by the corporation or association itself, the proceeds of which note are to be used to pay the current expenses of such corporation or association, such as the payment of wages and the purchase of supplies in connection with its business of packing and marketing agricultural products. Why? (2) The notes of associations the proceeds of which have been or are to be used to make payments to the growers for commodities delivered to the association. Why?

CHAPTER XX

FOREIGN BANKING SYSTEMS

512. Reserves of the Bank of England

BANK OF ENGLAND

An Account pursuant to the Act 7 and 8 Vict. cap. 32, for the week ending on Wednesday, the 7th day of March, 1923.

ISSUE DEPARTMENT

Notes Issued	£145,427,805	Government Debt	£ 11,015,105
		Other Securities	8,734,900
		Gold Coin and Bullion	125,677,800
		Silver	.....
	£145,427,805		£145,427,805

BANKING DEPARTMENT

Proprietors' Capital	£ 14,553,000	Government Securities	£ 47,411,626
Rest	3,664,795	Other Securities	70,394,305
Public Deposits—		Notes	21,959,695
(Including Exchequer, Savings Banks, Commissioners of National Debt, and Dividend Accounts)	15,867,866	Gold and Silver Coin	1,830,122
Other Deposits	107,491,128		
7 Day and Other Bills	18,959		
	£141,595,748		£141,595,748

Dated the 8th day of March, 1923, E. M. Harvey, Chief Cashier.

(a) What was the legal requirement of Act 7 and 8 Victoria, Cap. 32? (b) The law authorizes the use of gold coin and gold and silver bullion for cover of the notes: has the Bank ever used silver bullion for this purpose? (c) If one offers the Bank—the Issue Department—standard gold he is entitled to notes of the Bank at the rate of £3 17s. 9d. per ounce. How does this Bank Price differ from the Mint Price? What is the purpose of the difference? (d) Of what does the reserve against deposits consist? On the above date it amounted to 19.3%: how is it calculated? (e) What was the total gold reserve against the notes on the above date? What per cent was this?

513. Monopoly of the Bank of England

Act of 1709 renewing the charter of the Bank of England:

. . . . that during the continuance of the said corporation of the Governor and Company of the Bank of England, it shall not be lawful for any

other persons whatsoever, united or to be united in covenants or partnerships, exceeding the number of six persons, in that part of Great Britain called England, to borrow, owe, or take up any sum or sums of money on their bills or notes payable at demand, or at any time less than six months from the borrowing thereof.

(a) This provision, repeated in other later charters, was supposed to give the Bank of England a monopoly of joint-stock banking: did partnerships having fewer than seven members issue notes? Did the act restrict deposit banking? (b) In 1826 an act passed permitted the incorporation of joint-stock banks with power to issue notes provided they did not come within 65 miles of London: why was this act passed at this time? Why was 65 miles fixed as the limit? If a bank founded under this act later came to London did it lose its note issue privilege? (c) J. W. Gilbart founded the London and Westminster Bank in 1834 and challenged the monopoly of the Bank of England, claiming that the monopoly was one of note issue alone and did not include deposit banking. This contention was definitely affirmed in the Act of 1833. What were the provisions of this act? (d) What were Bagehot's objections to giving a monopoly of note issue to the Bank of England? (e) In 1921 the firm of Fox, Fowler & Co., amalgamated with Lloyds: since then the Bank of England has had a monopoly of note issue in England. What effect did this final amalgamation have upon this section of the Companies Act? (f) Besides the Bank of England, four other English banks issue notes: The Guernsey Banking Company recently amalgamated with the National Provincial Bank, Ltd., The Isle of Man Banking Company, The Lancashire and Yorkshire Bank, and the Westminster Bank. Locate these banks. Are they subject to English laws and system of taxation?

514. Bank of England in 1914 Crisis

Not since 1866, not even during the Baring Crisis of 1890, was the Act again suspended until the outbreak of the war, when by section 3 of the Currency and Bank Notes Act, 1914, the Bank was allowed, with the consent of the Treasury, temporarily to issue notes in excess of the legal limit. As a matter of fact the Bank did not take advantage of this, but relief was afforded by—

(a) The extension of the bank holiday, and the moratorium on the payment of bills of exchange which was twice extended.
(b) The issue of the £1 and 10s. Treasury notes under the (Currency and Bank Notes Act).
(c) Making Country, Scotch, and Irish notes and postal orders legal tender for a time.
(d) The closing of the Stock Exchange, and for some time prohibiting the selling of Consols at less than a price fixed by Royal Proclamation.—[Minty, English Banking Methods, p. 54, Isaac Pitman & Sons, New York, by permission.]

(a) How did the following measures render unnecessary the issue of notes beyond the legal limit: (1) the extension of the bank holiday; (2) the moratorium; (3) the issue of currency notes; (4) making Country, Scotch, and Irish notes and postal orders legal tender for a time; (5) closing the Stock Exchange; (6) prohibition of sales of Consols at less than prices fixed by Royal Proclamation? Explain how these measures of relief were a substitute for suspension of the Bank Act. (b) Just what was the authorized action in section 3 of the Currency and Bank Notes Act?

515. Currency Notes and the Bank of England

(Under 4 and 5 George V., cc. 14 and 72)

I. Issue Account

Total issued up to Feb. 28, 1923, inclusive—			Total cancelled or called in up to 28th February, 1923, inclusive—		
£1 notes.....	£1,991,628,774		£1 notes....	£1,773,389,237	
10s. notes....	557,965,492	10s.	10s. notes....	519,157,578	
Currency notes certificates..	163,170,000		Currency notes certificates	142,620,000	
Issued during the week ended 7th March, 1923—			Cancelled or called in during the week ended 7th March, 1923–		
£1 notes.....	6,754,971		£1 notes....	5,170,426	
10s. notes....	1,735,586		10s. notes....	1,391,530	
Currency notes certificates..	400,000		Currency notes certificates	270,000	
			Total.....	£2,441,998,771	
			Outstanding—		
			£1 notes....	219,824,082	
			10s. notes....	39,151,970	10s.
			Currency notes certificates	20,680,000	
				279,656,052	10s.
Total.....	£ 2,721,654,823	10s.	Total.....	£ 2,721,654,823	10s.

II. Balance Sheet

Notes outstanding.....	£	258,976,052	10s.	Currency note redemption account—			
Certificates outstanding.....		20,680,000		Bank of England notes.	£	22,450,000	
Notes called in but not yet cancelled.....		1,500,040		Gold coin and bullion....		27,000,000	
Investments reserve account.		11,904,795	14s. 10d.	Silver coin...		7,000,000	
				Government securities..		236,450,805	3s. 9d.
				Balance at the Bank of England...		160,083	1s. 1d.
Total.....	£	293,060,888	4s. 10d.	Total.....	£	293,060,888	4s. 10d.

Treasury Chambers, 8th March, 1923.

N. F. Warren Fisher,
Secretary to the Treasury.

(a) What are the provisions of 4 and 5 George V., C. C. 14 and 72? (b) What are the "currency notes certificates"? In what denominations are the currency notes? the Bank of England notes? (c) What items are held by the Bank of England to secure the redemption of the currency notes? What proportion of the notes are "uncovered"? (d) What is meant by the "uncovered issue"?

516. Currency Notes in England

As a consequence of the crisis which occurred at the beginning of the war, the Bank Act of 1844 was suspended, and the Treasury was empowered by the Currency and Bank Notes Act, 1914, to issue currency notes for £1 and 10s. as legal tender throughout the Kingdom. The Treasury was empowered to issue such notes through the Bank of England to any bank, as required, up to 20% of its liabilities on current and deposit accounts. The amount of notes issued to each bank was to be treated as an advance bearing interest at current bank rate. Currency notes are obligations of the Government and not of the Bank of England. No statutory provision has been made for either a limitation of their issue or any form or amount of reserve to be held against them. A reserve of Bank of England notes, gold coin, gold bullion, and silver coin has been built up amounting to 20% of the notes in circulation.—[Minty, English Bank Practice, p. 20, Isaac Pitman & Sons, New York, by permission.]

(a) Why are these notes popularly called "Bradburies"? (b) Look up the report of the 1918 Treasury Committee on Currency and Foreign Exchanges after the war, the Cunliffe Committee, and see what recommendations were made with respect to the future handling of these notes, as to (1) reserve, (2) reduction, (3) use of Bank of England notes as cover, and (4) final retirement. (c) What is meant by "suspension of the Bank Act of 1844"? At what dates has it been suspended, and with what result? (d) Can it be said that the issue of the "currency notes" was due to the inelasticity of the Bank of England notes? (e) What recommendations did the Currency Committee of 1925 make with respect to the currency notes? Does the present gold holdings of the Bank of England exceed the £150,000,000 reserve suggested by the Cunliffe Committee? How is the question of extinction of the currency notes related to the maintenance of the gold standard in England?

517. The Gold and Silver Market in London

The following brokers: Messrs. N. M. Rothschild & Sons, St. Swithin's Lane, and 19 Royal Mint Street, Messrs. Sharps & Wilkins, 19 Great Winchester Street, Messrs. Pixley & Abell, 27 Old Broad Street, Messrs. Johnson Matthey & Co., Ltd., 78 Hatton Garden, Messrs. Mocatta & Goldschmid, 7 Throgmorton Avenue, are the principal brokers for gold, and these firms and Messrs. Samuel Montagu & Co., 60 Old Broad Street, form the silver market. Before the War there was practically no market for

gold in the sense of a market for a commodity.—[Minty, English Banking Methods, p. 185, Isaac Pitman & Sons, New York, by permission.]

(a) Do the above brokers trade on an organized exchange? (b) Under the Act of 1816 and subsequent coinage acts, what is the Mint Price of gold? (c) Under the Bank Act of 1844, what is the Bank Price of gold? (d) Is it possible for a bank to buy gold in the market and sell it to the Mint at a profit? Why did the Midland Bank assemble so large a gold reserve before the war? (e) In November, 1920, the price of gold in London was at one time quoted at 122s.4d., and in 1924, it was quoted at 85s.10d. Explain this variation in the price of gold. (f) Who are the chief buyers of silver? How often does the price change? What is the approximate difference in amount between the "spot price requiring delivery within seven days," and the "forward price requiring delivery at the end of two months"?

518. The Gold Standard Act of 1925 in England

The Gold Standard Act, which was passed on May 5, relieved the Bank of England from the obligation to pay gold coin on demand against notes, while obliging the Bank to sell, if required, gold bullion in bars of approximately 400 oz. fine at the statutory price. The Act also confined to the Bank of England the right of having gold bullion coined at the Mint, and empowered the Treasury, for a period of two years, to borrow up to any amount for exchange operations, such borrowings to be repaid within two years of the date of issue.—[*The Statist,* British Banking Section, May 29, 1926, by permission.]

(a) Why were these provisions thought necessary in restoring the gold standard? (b) Explain the purpose of the $300,000,000 loan made in New York pursuant to this act. What use was made of the fund?

519. The English Gold and Silver Act of 1920

Under the Gold and Silver Act of 1920 it was made illegal to export gold or silver, except under licence, until December 31, 1925, or to melt down gold or silver currency coins. On April 28, 1925, the Chancellor of the Exchequer announced in Parliament that the embargo on exports of gold would be allowed to lapse at the end of 1925, and that as from the date mentioned a general export licence would be given in respect of gold obtained from the Bank of England. At the same time, £27,000,000 in gold held as cover against Treasury Notes was transferred to the Bank.—

[*The Statist,* British Banking Section, May 29, 1926.]

(a) Why was control of exports of gold regarded necessary by England in 1920, and not so in 1926? (b) Why was the reserve against the Treasury notes held separately from the Bank until 1926, and why was it then transferred? What has been the record of the volume of these Treasury notes and the reserve against them? (c)

What effect did this transfer of Treasury notes and their reserves have on the financial statement of the Bank of England?

520. Classification of English Banks According to Type of Business

(a) Give an illustration, that is, name a bank, of each of the following types of English bank:

(1) The central bank
(2) The joint-stock bank
(3) The country bank
(4) The private bank
(5) The colonial bank
(6) The agency of a foreign bank
(7) The merchant banker
(8) The bill broker
(9) The issue house
(10) The investment trust
(11) The acceptance house

(b) Institutions for specific purpose, are The British Shareholders Trust, The Council of Foreign Bondholders, The British Overseas Bank, The British Trade Corporation. What is the history, nature, and function of these four institutions?

521. Classification of English Banks According to Method of Incorporation

The following types are to be distinguished among English banks according to method of incorporation:

1. Established by royal charter—under terms of an Act of Parliament and a charter from the Crown: (a) Look up the origin of the charters of the Bank of England in 1694 and the British Trade Corporation in 1917. (b) Formerly banks were so chartered in England to do business in the colonies; but with the growth of self-government in the colonies, charters are now usually procured under the dominion government. Look up the origin of the charters of (1) The Chartered Bank of India, Australia and China, 1853, and (2) The Commonwealth Bank of Australia.

2. With unlimited liability: (a) Look up the Statute of 7 George IV, Chapter 46. Banks with unlimited liability were formed before 1844. (b) What were the particulars of the failure of the City of Glasgow Bank in 1878? Under the Act of 1879 companies were enabled to register themselves with limited liability: were there any banks that did not or could not so register? Look up Cox and Co.

3. With limited liability: (a) See section 3, subsection 1, of the Companies [Consolidation] Act of 1908. What is the significance of the term "Limited" in the name of an English banking house? How is the right obtained? (b) Examine the "Bankers Almanack" and see whether all or a majority of the banks enjoy limited liability?

4. Banking partnerships and private companies: (a) Banking partnerships consisting of not more than ten persons or private companies with or without limited liability registered under the provisions of section 121 of the Companies [Consolidation] Act of 1908, and the Companies Act of 1913. What were the provisions of these laws with respect to registration? (b) A private company is defined to be one that restricts the right to transfer its shares; limits the number of its members—except employees present or past—to fifty; and prohibits any invitation to the public to subscribe for any shares or debentures of the company. Examples of private companies with unlimited liability: Child & Co., Coutts & Co., Glyn Mills & Co., Charles Hoare & Co. What is the date of origin of these companies?

5. Limited by Guarantee: (a) See provisions of sections 4 and 21 of the Companies [Consolidation] Act of 1908, for banks whose liabilities are guaranteed up to a certain amount fixed in its charter. Sketch the history of the Commercial Mutual Credit Bank of 1919. [See Stock Exchange Year Book.]

6. Incorporated under the laws of the Channel Islands and the Isle of Man: (a) The Isle of Man Banking Co., the Guernsey Banking Co., and the Guernsey Commercial Banking Co., Ltd., are examples: are they subject to the English law? [Based on Minty, English Banking Methods, pp. 6-9. Isaac Pitman & Sons, New York, by permission.]

522. Deposit Accounts in English Banks—Interest on Deposits

Before the war the usual rate offered by banks for deposits was 1½% below Bank rate, whatever Bank rate happened to be. Owing to the increased expense in running their businesses, banks have for some time past required a larger margin now uniformily 2% below Bank rate which, since 5th July 1923, has been 4%. When Bank rate was 3½% the deposit rate offered by the London banks was 1½%, a margin of 2%, but when Bank rate was higher there was no uniformity, and many customers were able to put money on deposits at special rates. The only obligation on a depositor is that he may not draw cheques on his account and must give seven days' notice of withdrawal, which practically amounts to saying that he loses seven days' interest on money when he does not give notice.—[Minty, English Banking Methods, p. 173, Isaac Pitman & Sons, New York, by permission.]

(a) How do these practices compare with New York bank practices? Is the New York margin narrower? (b) Accrued interest is usually credited on the 21st of June and December up to the first of the half-year: what is the purpose of this anticipation? (c) On staff accounts very liberal terms are allowed, for example, interest at 5% and the privilege of check drawing; these accounts are usually run at a loss: what is the purpose?

523. Reserves of British Banks

(a) The sum of what items may be considered as constituting the secondary reserves of the British banks? What is the ratio of the sum of these items to the deposits? [Calculate the ratios for the "Big Five" banks and for the other 40 banks separately.] How do these ratios compare with the American banks? (b) How does "money at call and short notice" compare with similar items in the New York Clearing House banks? (c) The item "cash in hand and at bank" commingles two important items of cash reserve: is this the practice in reports of our national banks? What is the objection to such commingling? How does the reserve percentage compare with that of the New York Clearing House banks? (d) What percentage of the assets of all the banks are carried as cash reserve? How does the percentage for the Bank of England compare with this percentage for all the banks? (e) What is the ratio of the secondary and primary reserves for all the banks? (f) What is the ratio of the cash reserves to the combined notes and deposits liabilities? (g) What percentage of the 46 banks' assets are invested in the discount market?—[Based on data in *The Statist,* British Banking Section, May 29, 1926.]

524. Currency Accounts of English Banks

. . . every bank which is engaged in foreign exchange business must maintain balances of currency abroad with foreign banks on which it draws its drafts and to which it has credited the cable transfers it buys in the market. An English bank calls these accounts which it keeps with foreign banks its "Currency" accounts to distinguish them from the accounts of foreign banks kept with itself which are called the "Sterling" accounts. The currency accounts are kept in double columns on both sides. Cable transfers, cheques bought, etc., are debited in currency, and at the same time the sterling equivalent, worked at the rate of exchange at which the bank has bought them, is inserted in the adjunct sterling column. Cable transfers sold, drafts, etc., issued, are credited to the account in currency and their sterling value, worked at the rate at which the bank sold them, is inserted in the corresponding sterling column on the right-hand side. The bank is buying currency all the time at rates slightly higher than the rates at which it sells currency. At convenient periods or at the end of the half-year the debit balance of currency on the account is calculated at the rate of the day or at some average rate for the period, and brought down on the credit side. The credit difference between the sterling debit and credit columns represents the amount by which the proceeds for currency sold exceed the proceeds of currency bought after allowing for the value of the balance in hand. This credit sterling balance therefore represents the profit made out of the transactions put through the account and is written off once a fortnight or at some other regular interval by a debit entry transferring the balance to "Profit on foreign exchange account."—[Minty, English Banking Methods, p. 398, Isaac Pitman & Sons, New York City, by permission.]

(a) What are the corresponding names in American banks for these accounts? (b) How are these accounts related to the position sheets? (c) In reckoning the profit earned should the debit balance be calculated at the current rate for the day or at some average rate for the period? (d) If currency is bought or sold for forward delivery is it immediately deducted from the account and carried as earmarked? (e) Do these balances bear interest, and if so, at what rates? (f) How often are the accounts reconciled? New York banks commonly reconcile the accounts by sending photostatic copies of the ledger pages of their books: what is the purpose? Do the balances as reckoned by the English bank agree exactly with the balances as reckoned by the American bank? (g) Under what circumstances would an English bank open an account in a French bank for one of its customers? In such a case does it open the account in its own ordinary agent bank or in a bank specified by the customer? If in a specified bank, is the English bank liable in case of insolvency of that French bank? Do such accounts bear interest?

525. Credit for Cash and Collection Items in English Banks

(a) Are there such things as exchange charges or interest delays in England? (b) When items are credited to the account straight away "under reserve," how are dishonored checks and interest (if allowed) handled? (c) If the items are handled as "after collection" items, how are they accounted? (d) What are the respective value dates for town items, metropolitan items, country items, Scotch items, and Irish items? Compare these with the delays of availability in the United States. (e) Interest is commonly allowed on large accounts of foreign banks: why? If foreign banks remit sterling cheques for credit to their accounts, does the London bank indorse and guarantee previous indorsers as it puts the items through the clearing house?

526. Terms of Current Accounts in England

The conditions upon which current accounts may be opened vary in the country and in London. In London the rule is that a minimum credit balance of £50 must be maintained, otherwise a charge of a guinea per annum will be made for keeping the account. In London, unless there is a special arrangement, interest is not allowed on current accounts, and if a customer has a larger sum to his credit than he will need he usually transfers it to a deposit account which usually bears interest at 2% below the Bank rate. In the country no charge is made for keeping the account but a commission, usually ⅛%, is made on the debit turnover. Interest is sometimes allowed at rates as high as the rates allowed in London on deposit accounts.—[Minty, English Banking Methods, p. 166, Isaac Pitman & Sons, New York City, by permission.]

(a) Why should the difference exist between the London and country banks in respect of the terms and conditions of accounts current? (b) Which is the fairer to the depositor and bank, to charge a flat sum for keeping the account, to require a minimum credit balance, or to charge a commission on the debit turnover? (c) What is the difference between a debit balance and a credit balance, and why does one hear of debit balances more in English banking than in American?

527. Extent of Use of Commercial Credits in English Foreign Commerce

Before the war shipments of goods to the Continent were financed by the comparatively simple expedient of the exporter drawing on the importer and the importer accepting the draft against delivery of the shipping documents. Commercial credits were used mostly in the finance of shipments to South America and the Far East and were mostly handled by the foreign and Colonial banks and the merchant bankers. In those days the stability of the British £ and the high opinion held in foreign countries of English credit and good faith made it in many cases unnecessary for an English importer to open a commercial credit abroad, and the majority of credits handled by a bank were export credits opened in this country by foreign importers with the London agencies of foreign banks in favour of English exporters.—[Minty, English Banking Methods, p. 413, Isaac Pitman & Sons, New York City, by permission.]

(a) Show how the following factors have tended to cause a greater use of commercial credits: (1) international animosities in train of the war; (2) depreciation of currencies; (3) disorganization of shipping industry; (4) erection of tariff barriers. (b) Why should the business be passing to the "Big Five" joint-stock banks? (c) English banks class their commercial credits as "outwards" and "inwards": what are the corresponding names in America? (d) In America some banks divide the work of handling commercial credits on a functional basis, e.g., (1) section to handle opening of import credits and export credits, (2) section to handle documents imports and exports, and (3) section to handle payments and acceptances imports and exports. In England the departmentalization is between "outwards" and "inwards." Which is the better?

528. Check Crossing

Bills of Exchange Act, section 76:

(1) Where a cheque bears across its face an addition of—
  (a) The words "and company" or any abbreviation thereof between two parallel transverse lines, either with or without the words "not negotiable"; or
  (b) Two parallel transverse lines simply, either with or with-

out the words "not negotiable", that addition constitutes a crossing and the cheque is crossed generally.

(2) Where a cheque bears across its face an addition of the name of a banker, either with or without the words "Not negotiable," that addition constitutes a crossing, and the cheque is crossed specially and to that banker.

Section 79:

(1) Where a cheque is crossed specially to more than one broker, except when crossed to an agent for collection being a banker, the banker on whom it is drawn shall refuse payment thereof.

(2) Where a banker on whom a cheque is drawn which is so crossed nevertheless pays the same, or pays a cheque crossed generally otherwise than to a banker, or if crossed specially otherwise than to the banker to whom it is crossed, or his agent for collection being a banker, he is liable to the true owner of the cheque for any loss he may sustain owing to the cheque having been so paid.

Section 80:

Where a banker, on whom a crossed cheque is drawn in good faith and without negligence pays it, if crossed generally, to a banker and if crossed specially to the banker to whom it is crossed, or his agent for collection being a banker, the banker paying the cheque, and if the cheque comes into the hands of the payee, the drawer shall respectively be entitled to the same rights and be placed in the same position as if payment of the cheque had been made to the true owner thereof.

(a) May a bank pay over the counter to a person not a banker a check crossed generally or specially to a banker? (b) May a bank pay a check which bears two crossings, one of them not being to a bank that is the clearing agent for the other? (c) What is the origin of the system of crossing checks? Is it used in any other parts of the world than England?

529. The English Clearing System

(a) Distinguish between the following clearings in English banking: country clearing, metropolitan clearing, town clearing, walks clearing, branch clearing, agents' clearing. (b) When a new branch is opened, who decides whether it belongs to the Town, Country, or Metropolitan Clearing? What areas are covered by each? (c) How is a branch's service improved by being admitted to the Town Clearing? (d) Are there any provincial clearing houses in England? (e) In the English system of country clearing a check paid into Barclay's Bank, Newport [Monmouthshire] Branch, drawn on Lloyds Bank, Cardiff, 12 miles distant, is sent to London, 120 miles away, through the head offices. What is the warrant for this circuitous routing of checks? Why is it less wasteful in England than it would be in the

United States to remit all checks to one city, say, Chicago? How does it facilitate bank accounting? (f) If a check on the X branch of the Midland Bank is deposited in the Y branch of the Midland Bank, trace its course if X Branch is in the "Town Clearing"; if X Branch is in the Metropolitan Clearing; if X Branch is in the provinces? (g) How has the acquisition of Scotch and Irish affiliated banks changed the course of checks in clearing to those regions? What changes in "agency" relations? Are there any collection charges now? (h) What is the "Walks Department"? What items does it handle? What determines the arrangement of the walks?

530. The Bank Officers' Guild—British

[The Bank Officers' Guild] is a trade union of bank clerks. During the war, when, owing to the rise in the cost of living, there was a great deal of dissatisfaction among bank clerks about hours, salaries, and promotion, a number of bank clerks in the North of England formed an association which they intended should include the whole of the clerical employees of banks throughout the country. In 1920 the association was registered as a trade union, the objects of which are, besides the raising of the remuneration of bank clerks, the consolidation of the employees in England and Wales into a professional union. Among other objects it seeks to cooperate with directors in all educational facilities that will encourage the higher education of bankmen and produce general technical efficiency, and above all, to establish a Whitley Council of bank employees and bank directors for the discussion of aims, ideals and grievances, affecting the staffs and the profession. The Bank Officers' Guild has a membership of about 30,000, but is not formally recognized by the management of banks.—[Minty, English Banking Methods, p. 75, Isaac Pitman & Sons, New York City, by permission.]

(a) Why were trade unions so slow to arise in banking? Why did they arise during the war? Is banking not adapted to trade unionism? (b) What is a "Whitley Council"? (c) What is an "internal guild"? What is the attitude of the Bank Officers' Guild toward the "internal guilds"? (d) What is the attitude of Parliament toward the bankers' recognition of the Bank Officers' Guild? [See resolution of 18 April 1923.]

531. The Institute of Bankers—British

[The Institute of Bankers] provides education in banking subjects and holds yearly examinations and grants certificates to those that pass its examinations. Although the examinations are not compulsory for banking employees as are the examinations of most professions for their members, banks strongly encourage members of their staffs to enter for the examinations of the Institute and give a gratuity in most cases of £15 for passing the preliminary and £30 for passing the final. Except the language classes, which are held during the winter months, and the Gilbart lectures given at King's College, Strand, London, and other lectures given to members in

the provinces, the Institute does not provide courses of study or promote social activities among its members.—[Minty, English Banking Methods, p. 75, Isaac Pitman & Sons, New York City, by permission.]

(a) Are compulsory examinatons advisable for the practitioners of banking? If so, would the Institute of Bankers be a satisfactory body to give these examinations? (b) Should bank officers weight heavily the passing of the Institute examinations in determining the eligibility of employees for employment or promotion? What is the practice of American bankers in this regard with respect to the examinations of the American Institute of Banking? (c) What additional activities does the American Institute of Banking promote? (d) What is the official publication of the British and the American Institutes, respectively?

532. English Bank Reports

Section 108, Companies (Consolidation) Act of 1908:

> . . . every limited banking company or an insurance company or a deposit, provident, or benefit society shall before it commences business and also on the first Monday in February and the first Tuesday in August in every year during which it carries on business, make a statement in form marked C in the first schedule of the Act, and exhibit the statement in every one of its branches and be prepared to let any member or creditor of the company have a copy on payment of a sum not exceeding sixpence.

(a) What is the virtue of the first Monday in February and the first Tuesday of August that they should be chosen for dates of report of condition? How do these dates compare with the usual dates when the U. S. Comptroller of the Currency makes his "call"? (b) What is the content of the statement in "form marked C in the first schedule of the Act"? How does it compare with the form which the Comptroller of the Currency requires national banks to fill in? (c) Why is it required that the statement of condition be exhibited in every one of its branches and to the stockholders and creditors of the company? Is there a similar provision in the National Bank Law?

533. Deposits of the "Big Five" Joint-Stock Banks in England

See table on opposite page.

(a) Which bank has been growing the faster? (b) How can one estimate the degree to which this increase of deposits has been due to the rise of the price level? (c) How can one determine the degree to which the growth has been due to bank consolidations? (d) What are the deposit figures of the largest New York bank? (e) Is

(000 omitted)

Year	Midland	Lloyds	West-minster	Bar-clays	National Provincial
	£	£	£	£	£
1914.....	125,732 (Dec.)	117,657 (Dec.)	101,428 (Dec.)	61,740 (Jne.)	74,916 (Dec.)
1915.....	147,750	130,017	109,224	73,269 (Dec.)	81,589
1916.....	174,620	151,368	120,367	107,169	100,218
1917.....	220,551	174,068	146,855	128,881	112,597
1918.....	334,898	266,808	263,129	239,381	200,864
1919.....	371,742	324,711	304,848	295,550	251,731
1920.....	371,841	345,048	395,854	327,222	278,335
1921.....	357,117	347,507	318,142	330,407	272,921
1922.....	354,406	330,557	281,082	302,685	263,037
1923.....	360,268	340,169	269,732	301,031	263,786
1924.....	355,774	339,989	272,832	300,506	254,921
1925.....	348,682	337,178	271,379	305,723	252,737
1926.....	366,423	346,132	285,406	309,371	259,249

[*The Statist*, British Banking Section, May 29, 1926, by permission.]

the concentration of such big amounts of credit in an institution fraught with danger to the general public? Does the consolidation promote stability by diversifying risk? Does it make for economical handling of funds?

534. Types of Advances to Customers of English Joint-Stock Banks

There are two usual methods of making advances to customers—

(a) By way of overdraft. If a customer is allowed an advance by way of overdraft, the arrangement is that he may overdraw his account up to a certain amount agreed upon and the bank will honour his cheques as they are drawn up to that amount. He pays interest on the balance which varies accordingly as he draws cheques or pays in further sums to the credit of his account.

(b) By way of loan. When an advance is made by loan, the amount lent is debited to a loan account and credited to his current account, and he pays interest on the loan he has contracted at the full amount from the start.—[Minty, English Banking Methods, p. 106, Isaac Pitman & Sons, New York, by permission.]

(a) If the customer had immediate use for his advances, would he get the advances by way of overdraft or by way of loan? (b) In a system allowing advances by either overdraft or loan, are the average balances of the customers likely to be larger or smaller than where loans only are allowed? (c) If a check is drawn by a customer against his account and is deposited in some other branch of the system, what

effect does it have on the consolidated statement of condition of the bank?

535. Nature of the Head Office of an English Joint-Stock Bank

The head office of a bank in law denotes its registered place of business as mentioned in its memorandum of association. In banking practice the head office means all the departments necessary for the administration and supervision of the whole business of the bank, including its branches. In the main premises there is nearly always a large branch on the ground floor but it is organized like any other branch and is quite distinct from the departments of the head office above.—[Minty, English Banking Methods, p. 111, Isaac Pitman & Sons, New York City, by permission.]

(a) Is it proper to think of the main office as the main branch? (b) Is the main office usually in one building? (c) Is the main office always located in London? is the main office of each of the "Big Five" located in London? (d) Name the departments of the main office. (e) What is meant by the "Foreign" branch or "Overseas" branch? How is it related to the main office? (f) What extra departments must a bank doing a foreign business have? (g) In the Midland Bank what is meant by the "Cunard office"?

536. Directors of English Joint-Stock Banks

Directors obtain their appointments largely on account of their experience in certain kinds of business, and it is not necessary that their presence on the board marks any connection between other companies and the bank. Directors are nominated by the board as the occasion arises and their nomination is confirmed by election at the general meeting. The qualifications of directors are governed by the Articles of Association of the particular bank. In the case of the Midland, shares to the nominal value of £6,000 have to be acquired within one month of election. In Lloyds the qualification is £5,000, in the Westminister £2,000, in Barclays the holding of £1,000 nominal A and £1,500 nominal B shares, in the National Provincial £6,000 of subscribed capital. Directors are usually elected for three years, the Articles of Association providing that one-third of the directors shall retire every year. They are frequently re-elected, and it is very unusual for a director not to be re-elected if he again agrees to stand.—[Minty, English Banking Methods, p. 88-89, Isaac Pitman & Sons, New York City, by permission.]

(a) Contrast the qualifications of directors in the English joint-stock banks and in the national banks of the United States. What are the reasons for the differences, whether more severe or less? (b) Should boards of directors be slow-changing as to personnel? Why should the period be fixed at three years, a third leaving each year? (c) Should boards of directors be self-perpetuating by making their own nominations? (d) When joint-stock banks consolidate con-

sultative committees of the former directors are retained, at least for a number of years: what is the purpose of this scheme?

537. Comparison of the Statement of the Midland Bank, Ltd., with that of the National City Bank of New York

The following are condensed statements of:

MIDLAND BANK, LIMITED

December 31st, 1926

RESOURCES

	$5 = £1
Cash in hand and Due from Banks	$ 356,082,679.77
Money at Call and Short Notice	113,934,258.15
Investments	194,267,910.75
Bills Discounted	233,721,560.10
Advances	1,002,299,963.73
Liabilities of Customers for Acceptances and Engagements	185,327,225.96
Bank Premises	34,682,873.21
Investments in Affiliations	32,469,045.75
	2,152,785,517.42

LIABILITIES

Capital Paid up	63,328,990.00
Surplus	63,328,990.00
Deposits	1,840,800,311.46
Acceptances and Engagements	185,327,225.96
	2,152,785,517.42

THE NATIONAL CITY BANK OF NEW YORK

Including Domestic and Foreign Offices

CONDENSED STATEMENT OF CONDITION AS OF DECEMBER 31, 1926

ASSETS

Cash in Vault and in Federal Reserve Bank	$142,688,468.56	
Due from Banks, Bankers and United States Treasurer	164,213,887.59	$ 306,902,356.15
Loans, Discounts and Acceptances of Other Banks		789,012,949.62
United States Government Bonds and Certificates	$100,500,300.00	
State and Municipal Bonds	13,995,000.00	
Stock in Federal Reserve Bank	3,000,000.00	
Other Bonds and Securities	54,541,425.48	172,036,725.48
Subsidiaries:		
International Banking Corporation	$ 12,500,000.00	
Bank of Haiti	1,600,000.00	14,100,000.00

Bank Buildings		21,818,940.83
Items in Transit with Branches		22,808,953.82
Customers' Liability Account of Acceptances		63,197,905.60
Other Assets		4,512,058.58
Total		$1,394,389,890.08

LIABILITIES

Capital	$ 50,000,000.00	
Surplus	50,000,000.00	
Undivided Profits	16,287,091.72	$ 116,287,091.72
Deposits		1,083,599,159.90
Liability as Acceptor, Endorser or Maker on Acceptances and Foreign Bills		128,699,766.38
Circulation		92,995.00
Due to Federal Reserve Bank		50,000,000.00
Reserves for:		
Accrued Interest, Discount and Other Unearned Income	$ 2,752,776.76	
Taxes and Accrued Expenses, et cetera	5,076,133.85	
Dividend Payable Jan. 3, 1927	2,000,000.00	
Contingencies	5,814,398.97	15,643,309.58
Other Liabilities		67,567.50
Total		$1,394,389,890.08

Above includes the National City Bank of New York (France) S. A.
Figures of foreign offices are as of December 24, 1926

(a) Compare these two banks as to their interest in other banking institutions. (b) What is the difference regarding the legal requirements for maintaining reserves in the two banks? (c) Approximately what is the legal reserve against deposits on date of these respective statements? (d) Which of the two banks is doing the larger acceptance business in proportion to its capital? Why? (e) Compare the two institutions in regard to the following: (1) capital, (2) surplus, (3) liability of stockholders, (4) note circulation privilege, (5) investments.

538. London as a Foreign Exchange Market

Prior to the war London was not an important market for foreign exchange. At that time the sterling bill was supreme, and if a foreign merchant had a sum to remit to this country, he bought a sterling draft. The credit and reputation of English banks and merchants stood so high that a large bulk of the imports entering this country were financed directly without opening any import credit with a foreign bank in favour of the foreign exporter. The bulk of the foreign exchange business in London prior to the war involved the purchase and sale of long bills payable in foreign currency, and for this purpose merchants met at the Royal Exchange twice a week. It was only in 1906, when the Midland Bank began to deal in the market, that joint-stock banks transacted foreign business at all save through the intermediary of some dealer. Till then the

market was made up of the merchant bankers and agencies of the foreign banks. Even after the majority of joint-stock banks advertised that they were prepared to do foreign business and exhibited their "foreign exchange" medallions in their windows, they did not cater for more business than was brought by the needs of their domestic customers.

Since the war the position has totally changed. The joint-stock banks are now the most important dealers in the market, and instead of business being done mostly by dealers meeting in the Royal Exchange to sell long bills, nearly all transactions are agreed by telephone and nearly all dealings are done through the intermediary of a broker.—[Minty, English Banking Methods, p. 372, Isaac Pitman & Sons, New York City, by permission.]

(a) The pre-war stability of exchange rates required operations on a large scale, and made it possible to handle arbitrage transactions by letter in a leisurely way: show why. (b) The Royal Exchange has not met since December 1920: dealings are now made by telephone through brokers. How does this method of operation compare with the New York method? Is there, or was there ever, an institution in New York similar to the Royal Exchange? (c) Were the wide fluctuations in exchange rates during the War the cause of the change of method of doing the exchange business? Was the extension of and consolidation of joint-stock banking the cause? (d) The exchange brokers are increasing. Dealers never deal directly, always through brokers. Brokers need little capital, just "sufficient to hire a typewriter and buy a silk hat." Give reasons for these facts. (e) Although brokers' commission rates are usually ¼ per mille, they vary with the currency: why?

539. Factors Governing the Price of Council Bills

In general practice, two things may be said to govern the cost of India Council remittances: the greater or less need of the Indian Government for gold funds in London, and the total indebtedness of the outside market to India. If the Secretary of State was in no immediate hurry for sterling in London, he would endeavor to exact a high price for his remittances; the intensity of the demand from the trade often led to a good rate being obtained. The Government's limit to sales is fixed arbitrarily by the amount offered, and the price was to a certain extent under its control; but, even if the demand increase, it cannot go on week after week raising the rate. What might be called the remitters' limit is reached when the price for Councils reached gold export point—then 1s.4⅛d. per rupee. When that rate was reached, bankers and others were led to consider whether the business could be worked on another and cheaper method.—[Spalding, Eastern Exchanges, p. 41, Isaac Pitman & Sons, New York City, by permission.]

(a) How is this gold export point determined? (b) Are the sovereigns shipped to India always shipped from London? For instance, might they be shipped from Egypt or Australia? If so, how would the exchange be affected? (c) The gold bars of international

commerce are about 400 oz. each in weight, but those shipped to India weigh 5 or 10 oz.: why? (d) Coins that command a premium in London for shipment to India are the "shield" sovereign, the "bun-head" sovereign, and the "Jubilee" sovereign: why?

540. Voting Rights of English Joint-Stock Bank Shares

The rights of shareholders are fixed by the articles of association of the particular bank. In the Midland Bank the voting power is fixed, one vote for 1 to 24 shares, two for 25 to 49, three for 50 to 99, four for 100 to 149, five for 150 to 190, and six for 200 and upwards. In Lloyds voting power is fixed one vote for 5 to 29 shares, two for 30 to 79 shares, three for 80 to 129, and one for every fifty beyond up to a maximum of ten votes. The voting power in other banks is similarly arranged but as shares vary in their amount and paid-up portion, it is useless to compare voting powers according to the number of shares that confer them on the owner. —[Minty, English Banking Methods, p. 92, Isaac Pitman & Sons, New York City, by permission.]

(a) What is the purpose of this universal custom of giving the small holder disproportionate voting rights? (b) What effect does this have on the cost of buying a controlling interest in the bank? May shares be registered in the names of other than the real owners and thus evade the restriction on voting rights? (c) Look up Leeman's Act of 1867 [30 and 31 Vict. c. 29] and see how the sale of bank shares is restricted? What is the purpose of requiring that in the contract of sale the numbers of the shares be stated in the register? Is the law obeyed?

541. The Directors of the Bank of England

The Bank of England is governed by a board of directors who virtually nominate and elect their successors. In theory the shareholders are supposed to elect the directors, but new directors are usually recommended by the existing directorate and their election confirmed as a matter of course by the vote of the shareholders. A certain number of directors retire every year and remain out of office a year, when they are usually reelected. New directors are usually young men, the junior partners in business houses in the city of London who retire the next year and are reelected the year after. Until recently it was an unwritten convention that a director of a joint stock bank might not sit on the board. This convention was broken in 1920 by the appointment of Sir Charles Addis, Chairman of the Hong Kong and Shanghai Banking Corporation.

The Governor and Deputy Governor of the Bank of England are chosen by seniority from the directors and hold office for two years. . . . The Bank of England is managed by permanent officials subject to the supervision of half a dozen committees, the Committee of Treasury, the Committee of Daily Waiting, the Committee for Lawsuits and the Management of Branch Banks, a committee of the House and Servants and Clerks, and a committee for the Inspection of Cashier's Office and Account-

ant's Office.—[Minty, English Banking Methods, p. 16, Isaac Pitman & Sons, New York City, by permission.]

(a) Is the self-perpetuation of the board of directors wise? (b) What is the purpose of the forced retirement of a part of the directors every year and their re-election after a year's interim? (c) Why are directors from joint-stock banks disqualified from the directorate of the Bank of England? Is there a comparable provision in the United States against the directors of state and national banks being directors of the federal reserve banks? (d) Is the Governor of the Bank of England ever re-elected? (e) What is the function of each of the general committees named?

542. Contango or Backwardation in London Stock Market

If a purchaser does not want to take up the shares he has bought or a seller does not want to make delivery of shares he has sold, brokers and jobbers will nearly always make arrangement for him to carry over to the next settlement day by the machinery of what is called "contango" or "backwardation."—[Minty, English Banking Methods, p. 254, Isaac Pitman & Sons, New York City, by permission.]

(a) What is meant by "settlement day"? by "contango day"? (b) At noon on contango day an official of the House fixes what is called a "making-up price," and the purchaser owes or is due to receive the difference between this price and the price at which he originally bought the shares. But the jobber who has bought the shares from someone else has to take delivery and make payment on settling day. He has, therefore, to borrow money from a bank until next settlement day and is entitled to charge the interest lost to the broker who again transfers the charge to the purchaser." What is the "contango rate"? It depends upon the rate for money at short notice: why? (c) Suppose a customer does not care to make delivery on settlement day of shares he has sold: how is the contango operation executed? Is a short sale settled in similar manner on the New York Stock Exchange? What is the "rate of backwardation," and when does it arise? On the New York Stock Exchange when are shares said to loan "flat" or "at a premium"? (d) What is meant by "ticket day"? Why is the volume of clearings heavy on settlement day?

543. Methods of Amalgamation of British Banks

The following classes of amalgamation have been common among English banks—

1. Absorption by the purchase of a banking partnership or private company: (a) Is the absorbed house utterly extinguished? (b) How

are the proprietors paid? (c) How is the "personal relationship between the old banking firm and its customers" maintained?

2. Affiliation by purchase of shares: (a) Which is the more common method, to purchase the shares in open market or by advertisement, or by exchange of shares? (b) Does the affiliated bank continue its corporate existence, with separate board of directors and balance sheet?

3. Amalgamation proper, one bank going into voluntary liquidation and the other buying it up by the offer of shares: (a) See the procedure required in section 192 of the Companies [Consolidation] Act, 1908. (b) What determines the exchange ratio of shares? (c) How are dissentients handled?—[Based on Minty, English Banking Methods, p. 63, Isaac Pitman & Sons, New York City, by permission.]

544. British Bank Consolidation Movement

The following numbers of amalgamations occurred within the periods designated:

Period	Private Bank with Private Bank	Joint-Stock Bank Absorbs Private Bank	Joint-Stock Bank with Joint-Stock Bank	Private Bank Absorbs Joint-Stock Bank	Total Amalgamations
1825–1843...	23	93	6	0	122
1844–1861...	11	23	10	0	44
1862–1889...	31	66	40	1	138
1890–1902...	37	64	51	1	153
1903–1924...	1	36	58	0	95
	103	282	165	2	552

[Figures from Sykes, The Amalgamation Movement in English Banking, p. 97, by permission.]

(a) What were the conditions that made each of the above periods distinctive in English banking? Account for the differences in the type of amalgamating banks in the different periods. (b) What, if any, private banks are left in England? What are the "Big Five" banks? (c) How did the branch bank system tend to promote the amalgamation movement?

545. Estoppel of the Amalgamation Movement in England

. . . although there exists in England nothing of the nature of the Clayton Anti-Trust Act, the Kern amendment, and other pieces of legislation which operate in America to make amalgamations and interlocking of directorates under certain circumstances illegal, the understood convention that prior sanction shall be obtained from the Treasury acts as a

salutary check upon the indiscriminate amalgamation of banks planned for the purpose of obtaining monopoly.—[Minty, English Banking Methods, p. 71, Isaac Pitman & Sons, New York City, by permission.]

(a) Name the "Big Five" banks of England. (b) What proposals for restraining the amalgamation movement were brought in by the March 1918 Committee of the Treasury? What was the occasion of the appointment of this Committee? (c) What is the "understood convention" cited above? (d) In 1924 the Chancellor of the Exchequer stated: "Further amalgamation of the larger banks would not be likely to be viewed with favour." Does this mean that no further amalgamations of banks will occur in England? (e) What were the reasons alleged for the bank amalgamation movement?

546. Special Investment Institutions in England

(a) What are the history, purpose, and present functions of the following institutions in England: (1) The Council of the Corporation of Foreign Bondholders; (2) The British Shareholders Trust, Ltd. (b) Are there similar organizations in the United States? in France?

547. Trust Functions of English Joint-Stock Banks

Among the assets of the joint-stock banks of England are shares of trustee companies.

(a) What are these trustee companies? (b) What were the provisions of the Public Trustee Act of 1906? (c) Previous to this date had the joint-stock banks handled trustee business as a regular part of their business, as do trust companies in the United States? (d) Why did the joint-stock banks prefer to found and operate separate trustee companies to handle this trust business? Are they housed in separate buildings from the bank? (e) Contrast the origin of the trust company in England and the United States. (f) Do the English trustee companies handle both private and corporate trust work? (g) How do the following factors reduce the volume of trust work of English banks: (1) the practice of financing more largely by stocks than bonds; (2) the practice of reorganizing of corporations by lawyers rather than trust companies; (3) competition of the Public Trustee; (4) the practice of managing estates by a staff of lawyers constantly employed on the estate?

548. Bill Brokers

The bill broker is a specialist who buys bills from his clients with money which he borrows from the banks. He borrows at one rate and charges discount to his client at a higher, the difference being his turn or profit. The bill broker may realize his profit either by pledging the bills he has discounted as collateral for a loan, or by selling them outright to a

bank at a lower rate, the difference being of the nature of a commission which the bank is prepared to pay him for the use of his specialized knowledge and discernment in making a choice of such bills. If the broker rediscounts the bills the bank has the additional guarantee given it by the broker's indorsement.—[Minty, English Banking Methods, p. 52, Isaac Pitman & Sons, New York City, by permission.]

(a) Are bill brokers an old or a recently developed type of middlemen in the financial market? (b) Why is a call loan market on acceptances as collateral necessary to the success of the bill broker operations? Has this developed in New York? (c) Do New York note brokers indorse the paper which they sell? (d) How does the rate of commission in London and New York compare? (e) When a bill brokerage house becomes a discount house what changes occur? (f) Does the English joint-stock bank rediscount its paper with the Bank of England or does the note broker? Is this a regular or an emergency operation?

549. Brokers' Bills in England

In actual practice the lending of call money to the market, even in a large bank, is carried out by one senior officer whose work consists in interviewing some twenty or thirty brokers every morning and fixing contracts by word of mouth. . . . there is not one in a thousand bank officers who has any practical experience of brokers' loans . . . there is an amount which would lie idle at the Bank of England gaining no interest, and the joint-stock bank, to get some return on it, and at the same time to have it readily available in case of emergency, lends it out at short call to the bill brokers and other members of the money market. . . . Money may be lent "over night" and be definitely repayable the next day or at one or seven days' notice and be renewable from day to day. Under one type of agreement brokers agree to keep their loans covered by a certain margin of bills lodged as security.—[Minty, English Banking Methods, p. 321, Isaac Pitman & Sons, New York City, by permission.]

(a) Bill brokers call at the bank every morning to take orders for the purchase of bills and to inquire whether their loans will be renewed. Why do the brokers carry accounts at several banks? If a loan is not renewed at one bank, what does the broker do? If no joint-stock bank will loan, what is the broker's last resort? (b) Suppose the rates of commercial discount have fallen and the brokers cannot make use of the sums the banks are offering to lend, what happens? (c) Are the contracts between the bank officer and the bill broker written or oral? (d) Is there a call loan rate in New York on acceptance collateral? (e) Contrast the determination of the call loan rate in New York and London. (f) The banks even up their positions by buying bills maturing on certain days: illustrate the nature and purpose of this operation. The bills are bought from brokers:

do the brokers make any profit on their rediscounting? Do they indorse the bills they sell?

550. Merchant Bankers

Formerly, before the joint-stock banks entered into the foreign exchange business and there were fewer agencies of the foreign banks in London, the only way an exporter in this country could ship his goods to some remote countries with anything like certainty of being paid was for the foreign exporter to open a credit with one of the big importing firms in this country that also had an agency in the country abroad. The importing firm became a merchant banker in its relations with the English exporter which drew on it for the amount of the shipments against the delivery of the shipping documents. The shipping documents were sent out to the merchant banker's foreign agency and held until the foreign importing firm was in a position to take them up.—[Minty, English Banking Methods, p. 51, Isaac Pitman & Sons, New York City, by permission.]

(a) Why are (were) many English banking houses called "merchants"? (b) What is the historical reason why English merchants became brokers? acceptors? exchange dealers? collecting agents? (c) What was the function of the supercargo? (d) What effect on the merchant banker has the modern extension of the foreign exchange business had? (e) The Rothschilds are called merchant bankers: what is the nature of their operations?

551. Joint-Stock vs. Private Banking in England

I think the joint-stock banks are deficient in everything requisite for the conduct of banking business except extended responsibility. The banking business requires peculiarly persons attentive to all its details, constantly, hourly, daily, hourly watchful of every transaction, much more than mercantile or trading business. Joint-stock banking, of course, obliges to act through agents and not by a principal, and therefore under the restraint of general rules cannot be guided by so nice a reference to degrees of difference in the character of responsibility of parties, nor can they undertake to regulate the assistance to be granted to concerns under temporary embarrassments by so accurate a reference to circumstances, favourable or unfavourable, of each case.—[Lord Overstone, 1832].

(a) If the above contention is true why have joint-stock banks practically supplanted the private banks in England? (b) Did the development of collateral loans in London reduce the above objection to a minimum? (c) Is large-scale banking handled as well by private banks as by joint-stock banks?

552. Joint-Stock Banks vs. Private Banks in England

. . . the superior advantages of the corporate organization of a joint-stock bank to handle large business manifested itself, and one after another the private banks were glad to come to terms and amalgamate their

business with the joint-stock banks.—[Minty, English Banking Methods, p. 23, Isaac Pitman & Sons, New York City, by permission.]

(a) The Act of 1833—did it authorize joint-stock banks in London, or in the country, or in both? What were some of the earliest joint-stock banks? When were they first admitted to the London Clearing House? (b) The following are offered as reasons for the absorption of the private banks by the joint-stock banks: (1) less subject to fraud; (2) the rise of the check and clearing system in place of the bank note; (3) perpetual charters and ease at raising additional capital; (4) excessive conservatism of private banks; (5) rise of the branch system. (c) Did the London banks swallow up the country banks or the country banks absorb the London banks? First the joint-stock banks absorbed the private banks and then began absorbing one another: name the "big five" banks surviving. Which started as country banks? (d) Name the leading surviving country banks.

553. Operations of British Discount Companies

(a) Name the four leading discount companies in the order of size of total assets. (b) Is the ratio of "paid-up capital and reserve" to "total assets" lower for the discount companies than for the 46 banks? (c) Compare the proportions of assets consisting of "cash in hand and at banks," "investments," "bills discounted," and "loans," of the discount companies and of the 46 banks? (d) What is the ratio of "bills rediscounted" and "bills discounted," and what does it signify? (e) Is the discount house a more profitable institution than the other banks?—[Data from *The Statist,* British Banking Section, May 19, 1926.]

554. The Investment Trust

An investment trust is a particular type of public trust in so far that instead of placing its members' funds in real property it makes a specialty of investment in what are regarded as speculative securities. . . . The principle on which the investment trust works is of investing its members' capital in many kinds of securities and at the same time establishing out of accrued profits a reserve fund to provide for possible losses.—[Minty, English Banking Methods, p. 58, Isaac Pitman & Sons, New York City, by permission.]

(a) What are some of the various purposes for which trusts are formed in England? (b) In what sense is an investment trust an insurance company? (c) Is an investment trust in a position to "undertake the work of issue houses by buying large parcels of shares direct from companies and selling them subsequently when prices are advantageous"? (d) Do investment trusts diversify their investments

on the basis of geography, industry, or types of bonds and stocks having different rights?

555. Relation of Bank of England to Money Market

The Bank of England is the bankers' bank for the London Money Market. As such it holds the central cash reserve of the nation. This reserve is entirely a banking reserve, and the Bank of England has no means of preserving it in normal times except by selling stock exchange securities for cash and buying them in for the account, thus absorbing surplus loanable funds and compelling the market to raise its rate. . . . The Bank of England does not discount bills for the general public to any large extent. Its influence on the discount market is felt only when the large joint-stock banks call in money from the brokers and the brokers have recourse to the Bank of England to rediscount their bills and provide them with the means of repaying the joint-stock banks the money they owe.—[Minty, English Banking Methods, p. 18, Isaac Pitman & Sons, New York City, by permission.]

(a) Does a provincial or metropolitan English bank carry any reserve, other than till money, against its deposits? What relation does this practice bear to the short geographical distances in England? to the fact that the Bank of England has ten branches? (b) Is the Bank of England a source of day-to-day credit or simply of emergency credit? How does this compare with the conception of the federal reserve banks? (c) Show how the sale of securities on the London Stock Exchange tends to tighten the money market. Do the sales and purchases of U. S. Certificates of Indebtedness by the federal reserve banks have similar effects in New York? (d) Does the Bank of England operate in the open discount market to control the money rates? Contrast its practices in this respect with the Bank of France, the Reichsbank, and the federal reserve banks? (e) The Bank of England endeavors to compete as little as possible with the joint-stock banks; for this reason the latter are willing to carry larger balances with the former and not expect any interest. Give the logic of this arrangement. In the United States do the federal reserve banks pay interest on member bank balances and do they compete with the member banks?

556. Comparison of British Central Banks

Compare the Bank of England, Bank of Scotland, and Bank of Ireland, as to: (a) number of branches; (b) amount of paid-up capital and reserve; (c) notes in circulation; (d) ratio of notes to deposits; (e) ratio of cash in hand and at Bank of England to the deposit liabilities; (f) percentage of earning assets tied up in (1) investments, (2) money at call and at short notice, (3) bills discounted,

(4) advances.—[Based on data in *The Statist,* British Banking Section, May 29, 1926.]

557. Reasons for Bank Amalgamations in England

Weigh the following factors alleged to cause the bank amalgamation movement in England:

(a) Country banks were a type that had served their time and could not be developed any further. (b) Country banks could not meet the competition of the joint-stock banks. (c) Joint-stock banks procured membership in the Clearing House by absorbing private bankers who were members, the first joint-stock bank becoming a member in 1854. (d) Deliberate attempt of one bank to outdo another. (e) Race for deposits so as to lay claim to be the biggest bank in the world. (f) Amalgamation of one bank forced amalgamation of others if the banks wanted to keep their relative positions. (g) The convenience and gain to trade secured by an extension of bank areas. (h) Larger banks can safely make larger loans to individuals. (i) Reduction in ratio of capital and reserves to liabilities. (j) Reduction of competition. (k) Desire for monopoly. (m) Lower cost of doing banking services. (n) Personal ambition of certain bank officers. (o) Private bankers too conservative.

558. Issue of Small Notes in Scotland

Referring to the note issue of Scottish banks, one well-known writer stated: "It is in another quarter altogether that the Scotch banks find the value of the £1 note. It is the unissued notes in the tills of the branch offices, forming the till money at more than a thousand branches, wherein the real value lies. Without them the banks would require to keep £8,000,000 or £10,000,000 of gold coin, not as a reserve but as till money. It is these £1 notes which have enabled branch offices to be planted in every part of the country."

It thus appears, from the highest possible authority, that the Scotch banks are enabled by their right of note issue to economize gold to the extent of £8,000,000 or £10,000,000, and it is amusing to observe how the objects aimed at by Peel's legislation with regard to note issue have thus been defeated even more completely in Scotland than in England. In England, as has been shown, banking turned the flank of Peel's Act by developing the use of checks, which superseded the note as the common form of payment in daily transactions.—[H. Withers and Sir R. H. I. Palgrave, The English Banking System, National Monetary Commission, Washington, 1910 pp. 44-45.]

(a) Explain just how the abolition of small notes would require the reduction of the number of branches and the reduction of the interest rate paid on deposits. (b) In Canada one of the arguments for the issue of bank notes is the greater degree to which Canadian banks can permeate the country with branches; explain how note

issue facilitates branch banking. Would the same argument obtain in Scotland?

559. Note Issue Privilege of Scottish Banks

In the case of Scottish banks the law is very similar in essence to that which governs their English brethren. . . . since all the great Scottish banks possess the right of note issue, and regard it as a very valuable asset, whereas in the case of the English banks the note issue is now a negligible part of the banker's function, it will be seen that the regulation laid down by the law is much more important in Scotland than in England. These regulations were largely based upon the principles which dictated Peel's Act of 1844 for regulating the note circulation of the Bank of England and of the English banks. . . . In Scotland, since there was no leading institution enjoying any monopoly, the regulation which was applied to the Bank of England was applied to all the bankers as a whole. That is to say, the average amount of their circulation was ascertained, and it was laid down that in future any increase in that amount must be backed by an equivalent amount of bullion. It naturally followed from the terms of this act for regulating Scottish banking, passed in 1845, that any new bank thereafter created would not have the right of note issue and the result of this was that the then existing banks were given what amounted to a joint monopoly of the banking field in Scotland.

It may be added that, as in the case of the English joint-stock banks with a right of note issue, the liabilities of Scottish bank shareholders, in banks which are under the limited liability acts, is unlimited with regard to note issue. Three of the oldest of the Scottish banks, which were organized under charters, are believed to involve no further liability to their shareholders beyond the amount paid up on the shares, but, as in the case of the Bank of England, there is a certain amount of doubt with regard to the question of liability on shareholders.—[H. Withers and Sir R. H. I. Palgrave, The English Banking System, National Monetary Commission, Washington, 1910 pp. 95-98.]

(a) Explain the method of issuing notes by Scottish banks. How does it compare with the national banking in the United States with respect to note issue? (b) Are Scottish bank notes elastic? Explain. (c) Is there any important connection between the clearing system in Scotland and the note issue system? (d) Should stockholders of banks be subject to double liability? Why?

560. Competition or Monopoly in Scottish Banking

In Scotland the arrangements between bankers and their customers are very similar to those prevalent in England, differences between them being a matter of degree rather than of essence. . . .

But in the matter of the rates charged there is an important difference between English and Scottish banking, which also has been noted above. It lies in the fact that the Scottish banks form a combination which works together in complete harmony and unanimity. There is no possibility in Scotland for a customer who thinks that he might obtain a higher rate for a deposit or a lower rate for an advance to threaten his banker that he will go across the street to a competitor. The Scotch banks stand together and

adhere to the rates on which they agree among themselves as being equitable under the circumstances of the money market. The rates that they allow to depositors they usually regulate more or less in accordance with the London Bank rate, but their minimum is 1% and their maximum is 4%. They make no allowance on current accounts and nothing is allowed to depositors except on money which has remained in the hands of the bank for at least thirty days. The rates at which they will make advances or discount bills are equally definite and determined. . . . But it must be remembered that the control which they exercise is modified to some extent by the competition of the London money market, since their big customers sometimes resent the hard and fast rules of the Scottish monetary system and go south of the Tweed for accommodation.—[H. Withers and Sir R. H. I. Palgrave, The English Banking System, National Monetary Commission, Washington, 1910 pp. 105-106.]

(a) Is banking a monopoly in Scotland, or is it a competitive system? (b) What dangers, if any, are there in the practice of Scottish banks in fixing the interest to be paid on bank deposits to customers and on loans made to customers? (c) Is note-issue banking more profitable than deposit-banking? (d) Why should Scottish banks be influenced so strongly by English banks in fixing their interest rates?

561. Cooperation Among Scottish Banks

The banks are few and stand together like a close corporation; they agree absolutely and arbitrarily among themselves as to the rates they will allow to depositors, the rates at which they will advance or discount, and the terms and commissions for which they will do business for customers. The extent to which this regulation of the price of the product that they turn out is carried, is almost incredible from the English point of view, and though it is contended by the champions of the Scotch system that it encourages that wholesome democratic influence in Scotch banking which is in favor of the small borrower of limited resources, who is thus able to obtain accommodation on the same terms as much larger and more important customers, yet it must be obvious that the Scotch banks, by making these hard and fast agreements among themselves as to the price of the accommodation that they will give, and maintaining it in every case, are in fact putting the same price upon a very different article. The result of it is beginning to tell upon them a little in these days, since, when the big Scotch merchants and manufacturers find that their local bankers charge them the same rates for accommodation as the small tradesman of the towns, they are naturally impelled to make arrangements to provide themselves with monetary facilities somewhere south of the Tweed, where rates are ruled by the circumstances of each case, and competition and higgling often in times of monetary ease deliver the bankers into the hands of the borrowers. As it is, the Scotch banks in regular conclave fix their rates in accordance with those current in the London money market or the Bank of England's official minimum, and, having fixed them, stick to them.—[H. Withers and Sir R. H. I. Palgrave, The English Banking System, National Monetary Commission Report, Washington, 1910 pp. 49-50.]

(a) How do you account for this close cooperation among banks?

(b) Would such cooperation be possible in the United States? England? (c) Does this practice increase the cost of bank borrowing to the individual customer? (d) Do you agree with the idea that this method favors the small borrower?

562. Founding of the Bank of France under Napoleon

All the facts so far as known tend to prove that First Consul Bonaparte took the initial steps toward founding the Bank of France. He could not get what he wanted from the free banks. On the other hand, he felt that the Treasury needed money, and wanted to have under his hand an establishment which he could compel to meet his wishes. . . .

It is very likely that he broached the subject more in particular to certain bankers who were near him, especially Perrégaux, who had come from Neufchâtel several years before the Revolution and founded at Paris a very prosperous banking house. The directors of the Caisse des Comptes Courants, among whom was Perrégaux, were probably notified, for they came together and drew up the plan of a new establishment which was to take over the Caisse des Comptes Courants.

It would certainly seem that here originated the idea of creating a new bank of issue. However, public opinion, as represented by merchants and citizens of all classes, was brought into play. A certain number of these men met and prepared a petition addressed to the Directory, in which the signers requested the formation of a new credit institution. This occurred toward the end of 1799 and the first days of January 1800. . . .

The plan was to create a bank of discount, circulation, and issue with a capital of 30,000,000 francs. The figure was large for the time. How was this capital to be raised? This difficulty had been foreseen. To solve it they had prepared to merge the Caisse des Comptes Courants and the new bank, which was to be called the Bank of France. On January 18, 1800, the general assembly of the stockholders of the Caisse des Comptes Courants voted to dissolve this company and enter the new combination.

The capital stock was fixed at 30,000,000 francs and divided into 30,000 personal shares of 1,000 francs each. The Bank of France, according to its first statutes, was to engage in the following transactions; Discounts, collections, running accounts, the issue of notes payable to bearer on demand, and commerce in gold and silver bullion. It was also to open a sort of savings department called the savings and investment bureau, allowing interest to depositors. But for some reason this department was little patronized, and was abolished in 1808. At first it paid 5% on deposits; later 4%. [André Liesse, Evolution of Credit and Banks in France, National Monetary Commission Report, Washington, 1910, pp. 17-20.]

(a) Was the Bank of France a private or public bank? Who were the principal stockholders? (b) Does the statement attributed to Napoleon, "One bank is easier to watch than several," hold true? Is that principle applicable to the United States? Why? (c) What was the "Caisse des Comptes Courants" and the "Caisse d'Escompte du Commerce"?

563. Control of the Bank of France

The regents' council of 15 members was to administer the affairs of the Bank of France; its direct management was entrusted to a committee of three regents, and its supervision was committed to a council of three censors. A general assembly consisting of the 200 largest stockholders represented the whole body of stockholders. Five shares were enough to give the holder a vote, and he had as many as he had multiples of five shares, not exceeding a maximum of four.

Referring to the question of securing the capital, Liesse further comments as follows:

The great difficulties which were encountered here are officially stated in the report laid before the stockholders of the Bank on October 17, 1800. Here is the passage:

"The regents who were in charge of the Bank being convinced, owing to the scattered state of capital, that it would be useless to expect that the 30,000,000 francs which were to serve as banking capital would be subscribed promptly, simply by calling together stockholders, their first care was to call to the attention of the Government the protection and cooperation necessary to insure the success of the proposed establishment.

"The very day of their election, the directors addressed a petition to the Minister of Finance requesting him to obtain from the consuls the permission to deposit in the Bank of France the funds accruing from the bonds furnished by the collectors-general of the departments, and destined by the law of the sixth Frimaire preceding to the paying off of the public debt, and also to guarantee the payments of these same collectors-general. An order of July 18, 1800, granted the request, and 5,000,000 francs were deposited in the Bank in return for 5,000 shares registered to the credit of the sinking fund."

In the early part of March, 1800, a new decree of the consuls directed that the reserve fund of the national lottery should be deposited at the Bank. Little by little they succeeded in this way in disposing of 15,000 out of the 30,000 shares—that is, half of the capital stock stipulated in the statutes.

The Government had been in reality the first subscriber, through the agency of the sinking fund, but it had made the condition that in return for this first cooperation the unpaid obligations of the collectors-general should be met in full by the Bank of France to the amount not only of the sums standing to the credit of the sinking fund (which had deposited at the Bank funds proceeding from the bonds furnished by the collectors-general), but also an amount equivalent to the total of the shares bought by the Government, which, as we know, amounted to 5,000,000 francs.—[André Liesse, Evolution of Credit and Banks in France, Report, National Monetary Commission, Washington, 1910, pp. 19-22.]

(a) Compare the control of the Bank of France with that for the Bank of England? (b) What limitations were placed upon the voting power of the large stockholders in the English joint-stock banks? Why? (c) See Problem 536. Was the Bank of France a state bank in the same degree as the Imperial Bank of Russia? Why? (d) How are the two principal officers of the Bank of France selected?

564. Opérations Productives de la Banque de France

(en millions de francs)

	1923	1924	1925
Escompte des effets de commerce et bons du tresor	41,632	57,283	58,581
Effets au comptant	13,732	16,971	16,197
Avances sur titres	4	31,545	30,651
Avances sur titres en compte courant	25,011		
Avances sur lingots et monnaies	.....		
Billets à ordre et chèque déplacés	308	.....	.....
Opérations sur matières d'or	.....	606	730
Négociations de titres, encaissement par l'entremise de la Banque central d'arrérages de titres de chemins de fer envoyés par les succursales	1,494	.....	.....
Divèrs	64	1,874	2,151
Totaux	82,247	108,278	108,310

[*Annuaire Statistique.*]

(a) Taking the statement of the Bank of France of December 2, 1926 (given in Problem 566), enter the figures in the above table. (b) From the *Commercial and Financial Chronicle* get the amounts of notes of the Bank of France outstanding in June and December for the years 1923 to 1926. (c) What types of earning assets changed with the changing volume of notes? (d) Explain the nature of the various "opérations productives" named in the account.

565. Comparison of Leading Banks of New York and London

(a) What are the reasons for the greater number of stockholders for the London banks? (b) Contrast the locations of the branches of the London and New York banks. (c) Relative to their deposits do the London or New York banks have the larger capital?

Statistics of Leading New York Banks

(000 omitted)

	Stock-holders	Offices or Branches	Cap. Funds	Deposits	Resources
			$	$	$
Bankers Trust	3,600	5	50,000	405,600	531,900
Chase National	4,289	11	47,000	564,600	638,000
Nat'l Bk. of Commerce	6,536	4	65,000	543,700	679,800
Guaranty Trust	4,867	9	45,000	547,400	679,600
National City	8,000	52	115,000	921,600	1,215,000
Total	27,292	81	322,000	2,982,900	3,744,300
Average	5,458	16	64,400	595,580	748,860

STATISTICS OF LEADING LONDON BANKS

(000 omitted)

	Share-holders	Offices or Branches	Cap. Funds	Deposits	Resources
			$	$	$
Barclays	50,000	1,779	119,000	1,490,000	1,540,000
Lloyds	60,000	1,668	121,500	1,690,000	1,875,000
Midland	57,000	1,807	119,500	1,740,000	2,060,000
Natl. Provincial	38,000	705	94,500	1,270,000	1,465,000
Westminster	70,000	907	90,500	1,345,000	1,505,000
Total	275,000	6,866	545,000	7,535,000	8,445,000
Average	55,000	1,373	109,000	1,507,000	1,689,000

[*The Annalist*, February 26, 1926.]

566. Banque de France et Succursales

Situation Hebdomadaire

ACTIF			Au 2 Décembre 1926 Matin
Encaisse de la Banque			5.889.483.526 62
Disponibilités et Avoir à l'étranger	Créance sur la Banque de l'État Russe. (Convention du 26 Octobre 1917, art. 3).		mémoire
	Disponibilités à l'étranger		80.907.075 61
Achats d'or, d'argent & de devises (Loi du 7 Août 1926)			1.483.996.995 44
Effets échus hier à recevoir ce jour			221.114.696 86
Portefeuille de Paris	Effets sur Paris	1.396.680.634 74	
	Effets sur l'Étranger	15.581.713 37	1.412.823.980 76
	Effets du Trésor remis à l'encaissement	561.632 65	
Portefeuille des Succursales	Effets sur place	3.675.819.207 34	
	Effets du Trésor remis à l'encaissement	12.587.326 66	3.688.406.534
Avances sur lingots & monnaies à Paris			
Avances sur lingots & monnaies dans les Succursales			
Avances sur titres à Paris			222.359.883 69
Avances sur titres dans les Succursales			1.894.716.986
Avances à l'État (Loi du 9 Juin 1857; Convention du 29 Mars 1878; Loi du 13 Juin 1878 prorogée, lois des 17 Novembre 1897, 29 Décembre 1911, et 20 Décembre 1918)			200.000.000
Avances à l'État (Lois des 5 Août et 26 Décembre 1914, 10 Juillet 1915, 16 Février et 4 Octobre 1917, 5 Avril et 7 Juin 1918, 5 Mars et 17 Juillet 1919, 20 Avril et 31 Décembre 1920, 31 Déc. 1922, 27 Déc. 1923, 31 Déc. 1924, 15 Avril, 27 Juin, 23 Novembre & 4 Décembre 1925)			36.700.000.000
Bons du Trésor français escomptés pour avances de l'État à des Gouvernements étrangers (Lois des 1er Avril et 29 Décembre 1915, 15 Février et 4 Août 1917, 22 Mars et 20 Décembre 1918)			5.535.000.000
Rentes de la réserve	Loi du 17 Mai 1834		(*a*) 10.000.000
	Ex-Banques départementales		(*b*) 2.980.750 14
Rentes disponibles			240.137.183 91
Rentes immobilisées (Loi du 9 Juin 1857) (y compris les 9.125.000 de la réserve			(*c*) 100.000.000
Hôtel et mobilier de la Banque			(*d*) 4.000.000
Immeubles des Succursales			205.034.667 28
Dépenses d'administration de la Banque et des Succursales			98.850.532 27
Emploi de la réserve spéciale			(*e*) 8.407.438 93
Divers			4.387.726.094 21
			62.385.946.345 72

PASSIF

Capital de la Banque			182.500.000
Bénéfices en addition au capital (Lois des 9 Juin 1857 et 17 Novembre 1897)			217.919.047 77
Réserves mobilières	Loi du 17 Mai 1834	(*a*)	10.000.000
	Ex-banques départementales	(*b*)	2.980.750 14
	Loi du 9 Juin 1857	(*c*)	9.125.000
Réserve immobilière de la Banque		(*d*)	4.000.000
Réserve spéciale		(*e*)	8.407.444 16
Compte d'amortissement (Lois des 26 Décembre 1914 & 20 Décembre 1918			
Garantie d'amortissement (Convention du 26 Octobre 1917, article 3)			mémoire
Excédent affecté à l'amortissement des avances à l'État			1.207.455.038 41
C^te^ annexe d'intérêts du c^te^ d'amortissement (Loi du 20 Décembre 1918)			18.912.409 69
Billets au porteur en circulation			53.331.797.775
Arrérages de valeurs transférées ou déposées			53.697.942 72
Billets à ordre & récépissés payables à Paris et dans les Succursales			420.015 80
Compte courant du Trésor			13.548.991 01
Comptes courants et Comptes de Dépôts de fonds à Paris			3.197.183.338 66
Comptes courants et Comptes de Dépôts de fonds dans les Succursales			1.607.653.679
Dividendes à payer			3.943.913
Escomptes et intérêts divers à Paris et dans les Succursales			198.957.427 91
Réescompte du dernier semestre à Paris et dans les Succursales			22.830.042
Divers			2.294.613.530 45
			62.385.946.345 72

Certifié conforme aux écritures:

Le Gouverneur de la Banque de France,

E. Moreau

DÈCOMPOSITION DE L'ENCAISSE

		Au 2 Décembre 1926
OR	En caisse	3.684.483.348 82
	à l'Étranger	1.864.320.907 70
	Total	5.548.804.256 52
ARGENT		340.679.270 10
	Totaux	5.889.483.526 62

TAUX DES OPÈRATIONS

Escompte	7½%
Avances sur lingots	2%
Avances sur titres	9½%

(a) Of what does "Encaisse de la Banque" consist? Why carry so much of it abroad? (b) What is the nature of the "memoire" carried among the assets? (c) What was the law of August 7, 1926? What was its purpose? What use has been made of it? (d) In the portfolios of the Bank at Paris and of its branches appear "Effets sur Paris" and "Effets sur place"; compare these items with the "Avances sur titres à Paris" and "Avances sur titres dans les Succursales." What does the comparison reveal as to the nature of the banking? (e) Account for the huge size of the "Avances á l' Etat." What relation does this item have to "Billets au porteur en circulation"? (f) Compare the amounts of the items "Billets au porteur en circulation" and "Comptes courants." What does this show as to the character of the banking done? (g) Explain the nature of the three "taux des operations" given. Why is the bank discount rate likely to be high during inflation? Will the higher rate tend to stop the inflation?

567. Rise of Credit Companies and the Bank of France

. . . . the laws of 1863 and 1867 gave better facilities for founding great industrial and commercial credit companies. The concentration of capital must be made to correspond to the concentration of industries that results from new inventions. This is a mathematical function of an economic movement. Then new credit companies were founded, which felt their way for a while, at a time when one of them, the Comptoir d'Escompte, produced by the events of 1848, had in its origin the form of the credit companies of the future. Founded for the purpose of acting as an intermediary between merchants, manufacturers, etc., and the Bank of France, it was the first bank which achieved the aim of the Bank for the public. The war of 1871 turned aside this development for a time, or at any rate, precipitated it. . . .

Finally, in the third period, the methods of the credit companies became more clearly defined. They gradually extended their activity in France by means of numerous branch offices or agencies. The Bank of France followed the same movement, either of its own accord, or by reason of conditions imposed by the Government. The present organization of credit began to take shape; the rôle of the credit companies grew in importance; they adapted themselves to the temper of the country and of their depositors; they engaged preferably in discounting, in short-date operations; they made every effort to render available by means of suitable investments the capital entrusted to them, which they received at sight in much greater amounts than on time. . . .

. . . . our special banks for advancing funds for silent partnerships in industrial enterprises (*commandites*) are few in number. There is, to be sure, one great concern, the Banque de Paris des Pays-Bas, which is working in this field, conforming to the principle of the division of labor and of risks, exploiting its own capital and, unlike the credit companies, not accepting deposits, which later could not properly be employed by this company for the operations in which it engages. It does business on a large scale only, and is organized for that purpose.—[André Liesse, Evolution of Credit and Banks in France, National Monetary Commission Report, Washington 1910, pp. 237-239.]

(a) How do you account for the rise of these credit companies? Are they in competition with the Bank of France? (b) Do these credit companies occupy the same place in the French banking system that the joint-stock banks do in London? (c) Should banks be silent partners in an industrial enterprise? Why?

568. Relation of the Government of France to the Issue of Notes by the Bank of France

The advances of the government by the Bank of France are in the form of bank notes fresh from the printing press and they circulate throughout the country as ordinary currency. . . . The advances from the Bank of France increased rapidly from the beginning of the war until by the end of 1920 they stood at 26,600,000,000 francs. The deflation of

1921 followed by a depression in 1922 brought about a liquidation of a small amount of the advances during the next few years and the belief became general that the period of inflation had ended. This belief received a rude shock early in 1925 when it was discovered that between January 3 and April 25, 1925 under the government's urgent need for funds the records of the Bank of France had been falsified in order to issue notes to the government in excess of the legal limit.—[Newspaper report.]

(a) What is the relationship of the government and the Bank that makes such government interference possible? (b) What were the circumstances under which this event occurred? (c) Is such interference by the United States Treasury possible in the conduct of the Federal Reserve System?

569. Circulation et Emission des Billets de Banque de la France

(Valeurs en millions de francs)

Billets de	1923		1924		1925	
	Emission	Circulation au 24 décembre	Emission	Circulation au 24 décembre	Emission	Circulation au 24 décembre
1000 francs...	1,900	13,592	3,050	15,588	6,950	21,490
500 " ...	475	2,366	600	2,615	425	3,062
100 " ...	2,483	15,509	2,643	16,331	4,252	19,015
50 " ...	723	3,370	980	3,298	933	3,598
25 "	.....	.....	.....	.....	.....	.....
20 "	.....	1,246	.....	738	.....	421
10 " ...	710	960	1,056	1,281	1,253	1,562
5 " ...	419	720	444	754	528	845
Totaux.....	6,709	37,763	8,772	40,604	14,342	49,993

[*Annuaire Statistique.*]

(a) Did the proportions which the different denominations of notes formed of the total circulation change with the inflation during these years? If so, why?

570. Mouvement Général des Caisses de Banque de la France

(en millions de francs)

	1923	1924	1925
Espèces.....	581	563	552
Billets.....	225,726	270,543	266,856
Virements.....	1,358,650	1,723,219	1,812,248
Totaux.....	1,584,956	1,994,325	2,079,656

[*Annuaire Statistique.*]

(a) Interpret these changes.

571. Opérations Mensuelles de la Chambre de Compensation des Banquiers de Paris années 1916 à 1925

(en millions de francs) Montant des effets présentès à la compensation

Années	Jan	Fév	Mars	Avr	Mai	Juin	Juil	Août	Sept	Oct	Nov	Déc	Total	Montant des effets compensés	Montant des effets non compensés et réglés par mandat
1916	.....	.....	.....	.....	.....	.....	322	349	374	393	396	353	2,189	1,841	346
1917	414	350	388	388	421	437	717	1,927	1,832	2,370	2,177	2,285	13,707	9,948	3,759
1918	2,905	2,983	3,499	2,983	4,289	3,150	2,856	2,993	3,360	3,271	3,071	3,186	38,547	27,927	10,617
1919	3,863	3,611	4,136	4,733	5,264	5,470	5,856	5,738	7,507	7,926	8,296	10,536	72,934	58,696	14,242
1920	10,913	11,685	14,126	14,705	14,084	13,783	13,920	13,913	13,520	14,147	16,105	16,220	167,128	138,245	28,878
1921	16,426	14,187	14,447	15,599	15,976	15,144	10,946	12,135	14,383	11,583	12,620	13,710	167,154	139,434	27,725
1922	12,229	11,745	12,286	9,860	11,805	11,856	13,487	12,789	12,586	14,451	18,794	15,756	157,645	134,743	22,901
1923	18,864	19,005	20,373	18,252	16,995	19,063	19,122	19,855	19,020	23,674	22,980	21,515	238,722	212,095	26,626
1924	36,847	37,252	46,651	34,643	33,704	31,058	25,229	25,017	24,019	24,532	21,979	27,126	368,059	368,059	37,802
1925	23,913	24,649	29,170	27,889	25,390	33,895	29,454	24,283	24,716	39,811	42,105	46,379	371,656	371,656	36,225

(a) Plot the above series on ratio paper and determine the periods of most rapid absolute and relative expansion.
(b) On the same sheet plot an index of prices in France: what relation is found to obtain?
(c) Correct the clearings for price change and observe the trend. What influence on trend did the following factors have on clearings: (1) Inflation of price level? (2) Greater use of checks? (3) Greater use of clearing house?
(d) What is the ratio of clearings to balances not cleared, from year to year? Explain the changes in this ratio.

572. Effect of Stabilization of Franc on Reserve Ratio of Bank of France

STATEMENT OF JUNE 9, 1926

I.	Total reserves (gold in vault, silver at bullion value, foreign balances)	4,584,000,000 francs
	Notes in circulation	53,353,000,000 "
	Reserve ratio	8.6%
II.	If franc were stabilized at 4 cents:	
	Total reserves	22,118,000,000 francs
	Notes in circulation	53,353,000,000 "
	Reserve ratio	41.5%
III.	If franc were stabilized at 3 cents:	
	Total reserves	29,490,000,000 francs
	Notes in circulation	53,353,000,000 "
	Reserve ratio	55.3%

(a) Explain these calculations. (b) If the rate of exchange in New York or Paris were 3.5 cents, would it be better to stabilize the franc at 3, 3.5, or 4 cents?

573. French Budget Deficits

(In millions of francs)

	1919	1920	1921	1922	1923	1924	1925*
Expenditures	54,956	57,501	46,492	37,929	37,944	41,214	36,600*
Revenues	8,221	15,469	18,511	19,014	21,307	27,083	31,700*
Deficit	46,735	42,032	27,981	18,915	16,637	14,131	4,900*

*Estimates.

(a) On ratio paper plot the curves for these three series and for the volume of notes of the Bank of France outstanding on December 31 of the respective years, what relations are observed? (b) On another sheet of ratio paper plot the inverse curve of the rate of franc exchange in New York against the volume of notes of the Bank of France and the curve of deficits. How are these curves related?

574. Relations of French Public Debt and the Bank of France

CLASSIFICATION OF PUBLIC DEBT OF FRANCE OCT. 31, 1925
(millions of francs)

I.	External:		
	(1) Political		
	(2) Commercial		
II.	Internal:		
	(1) Perpetual and Long Term		160,436
	(2) Short Term		38,816
	(3) Floating:		
	(a) Bons ordinaires du Trésor		3,623
	(b) Bons de la Defense nationale		46,659
	(c) Avances nouvelles de la Banque de France		29,950
	(d) Autres comptes portant intérêt		8,832
	(e) Dette ne portant pas intérêt		
			89,064
			288,316

(a) Explain item II (3-c). What proportion is it of the total floating debt? (b) What is the corresponding item in the statement of the Bank of France? (c) What relation obtains between this item and the volume of bank notes outstanding?

575. Summary of Note Inflation in Germany during the War

To the 23,648 million marks of imperial bank note circulation there should therefore be added 10,170 millions of loan bank notes, making a total of 33,818 million marks of fiduciary currency issued by the two bank authorities. These notes apparently are put into circulation largely by the Reichsbank, which receives them from the Darlehenskassen in exchange for its own notes. The Reichsbank retains part of the loan bank notes, which according to the law of August 4, 1914, may be counted as part of the bank's one-third legal reserve cover for its own bank notes and to a limited extent also as cover for the 360 million treasury notes, the maximum issue authorized at the outbreak of the war. On January 31, 1919, 5,988 million marks of the loan bank notes were held in the Reichbank, which, added to the 10,170 millions in circulation, brings the total amount of such notes outstanding to 16,158 million marks, indicating that loans aggregating this amount were made by the loan banks.—[Federal Reserve Bulletin, May, 1919, p. 432.]

(a) German currency inflation was promoted by Reichsbank notes, Darlehnkassenscheine, Treasury notes, and the issues of municipalities. Show the interrelations of these circulating media. (b) What were the Darlehnkassen?

576. Control of the Reichsbank before the War

At the head of the Reichsbank stands the Chancellor of the Empire, who directs the whole bank management according to the provisions of the Bank Act and the Bank Statute. He is invested not only with important special powers which the act enumerates, particularly in the authority to issue orders and official instructions for the conduct of business, but also in the general provision that the Reichsbank Direktorium, which is directly under the Chancellor, must at all times obey his orders. He is president of the Curatorium, which supervises the Reichsbank on behalf of the Empire. In case of the Chancellor's unavoidable absence, he is represented in all functions affecting the Reichsbank by a substitute appointed by the Emperor.

The Reichsbank Direktorium, which, under the Chancellor, has immediate control of the Reichsbank, is designated in the Bank Act as the managing and executive body. Its members are the official representatives of the Reichsbank. It is endowed with special independent powers, even though these can be checked by higher officials; it acts in its own name as the central managing body of the Reichsbank, forms its resolutions on its own responsibility by majority vote, and has the rights of a "supreme imperial board." . . .

The activity of the Reichsbank Direktorium as head of the central administration for the whole Bank is shown not only in its supervision, its

official instructions, its business rule conforming with the law, ordinances, and directions of the Chancellor, but also in its responsible general management of the business itself. All transactions of the Reichsbank as a whole, and, furthermore, all transactions of greater importance which do not fall within the scope of ordinary business as defined in the official instructions, are reserved to the Direktorium; many other matters carried out by branch offices require the consent of the Direktorium in each particular case. The branch institutions, even when endowed with independent powers, are under the supervision of the central board, which is constantly kept informed about the business by means of reports and statements, and convinces itself of their correctness through special reports and revisions.

The Reichsbank Direktorium is a board with a president, since 1887 also a vice president, and six other members. The president and members of the Direktorium are appointed for life by the Emperor upon nomination by the Bundesrat, the members after approval by the central committee. The salaries and pensions of the Directorate are determined annually in the imperial budget.—[The Reichsbank, 1876-1900, National Monetary Commission, Washington, 1910, pp. 42-44.]

(a) Was the government dominant in the Bank's organization and control? (b) What rights and influence did the private owners have? (c) Was the bank organization and control consonant with the pre-war Imperial system? (d) Was the system of control cumbersome? (e) What was the duty of the central committee?

577. Reichsbank's Comparative Statement

(000 omitted)

	Changes for Week Reichsmarks	Feb. 7, 1927 Reichsmarks	Feb. 6, 1926 Reichsmarks	Feb. 7, 1925 Reichsmarks
Assets—in thousands				
Gold and bullion.....Dec.	60	1,834,601	1,255,617	844,807
Of which depos. abr'd..Dec.	20,948	101,472	142,981	198,653
Res've in foreign curr..Dec.	127,663	293,419	418,539	81,020
Bills of exch. & checks.Dec.	36,697	1,378,338	1,411,337	1,646,832
Silver and other coin...Dec.	1,388	125,422	82,889	65,535
Notes on oth. Ger. bks..Inc.	690	7,255	21,288	22,382
Advances.....Dec.	33,785	47,833	5,118	47,050
Investments.....Inc.	1	88,885	233,761	109,878
Other assets.....Inc.	27,924	598,118	779,018	1,627,549
Liabilities—				
Notes in circulation....Dec.	125,924	3,283,692	2,563,103	1,839,531
Oth. daily matur. oblig.Dec.	31,211	543,355	765,307	818,710
Other liabilities.....Inc.	2,369	203,163	570,562	1,533,232

(a) Examine the changes in the several items, and note the trends. Give the reasons for the changes.

578. Method of Control of Money Market by Reichsbank

The position which a central bank of issue takes in the money market of its country is essentially dependent on the number of circulating bills which it concentrates in its portfolio. The greater this number the greater will be the control of the bank over the market and the more successful its discount policy. As the wealth of a land increases the influence of its central bank of issue will naturally decline; the more capital there is produced in the country and the more this capital collects in the most varied hands the less will the demand for capital seek satisfaction at the central bank.

In contradistinction to other banks of issue, the discounting of bills forms in the case of the Reichsbank the principal asset, not only occasionally, but constantly, and the strongest basis for its existence. In 1900 the average holdings in bills amounted to 42.3 per cent of its total assets.—[The Reichsbank, 1876-1900, National Monetary Commission, Washington, 1910, pp. 145-146.]

(a) What advantages would the Reichsbank realize from carrying part of its assets in foreign bills? (b) Give an illustration of an occasion when the Reichsbank would enter the market to buy foreign bills? to sell foreign bills? (c) Are the open-market operations of the Reichsbank similar to those of the Federal Reserve banks of the United States?

579. Reichsbank Reserve Requirements

The Reichsbank has the right of note issue for fifty years, but the existing rights of the Würtemburg, Bavarian, Saxon and Baden Note Banks are reserved, their collective issues not to exceed 194 million marks —a quite small amount. The Reichsbank may make advances against gold and silver, certain Railway Bonds and Shares, State Certificates of Indebtedness falling due within twelve months, Bills and Commodities. All bills must regularly bear three names, instead of two required under the old system—in other words, purely commercial bills must be rediscounted with the Reichsbank with the endorsement of a bank or other financial establishment, as the ordinary commercial bill bears only the names of the drawer and acceptor. The requirement of a third signature may be dispensed with in some cases for a limited amount. The amount of the note issue is to be covered by gold or foreign exchange up to 40%, of which three-quarters, or 30%, must be represented by gold. The remaining portion is to be covered by discounted bills and cheques satisfying specific requirements. Only in exceptional cases may the cover sink below 40% on consent being given by the General Council against, at the most, one dissenting vote. In this case the Bank has to pay on the difference arising on the 40% cover a tax as follows:

On a cover of between 37% and 40%.....3% per annum
On a cover of between 35% and 37%.....5% per annum
On a cover of between 33⅓% and 35%....8% per annum

and a further 1% per annum on every 1% below the cover of 33⅓%. When the cover is below 40% the discount rate must be at least 5%. In case the tax is paid, the discount rate must be increased by at least one-third of the percentage of the tax plus each increase of the aforemen-

tioned rates. That is, it would seem that if the tax of 3% becomes payable between the limits of 37% and 40%, the discount rate must be at least 5%, plus 1%, that is 6%, and increase till when the limit of 35% is passed the rate will be 5% plus ⅝%, or 7⅜% at least. This system of combined raising of the interest rate and the tax penalty should be completely efficacious.—[Leaf, Banking, p. 75, Henry Holt & Co., New York City, by permission.]

(a) Point out the ways in which the present reserve requirements differ from the pre-war requirements? (b) What evidences of the American origin of the Dawes Plan is found in these reserve requirements for the new Reichsbank? (c) Does it seem that the reserve requirements of the new Reichsbank are more severe than those of the Federal Reserve System? (d) Are any reserve requirements laid down against deposits? (e) Procure a recent statement of the Reichsbank and determine whether the reserves are well within the requirements. [See weekly statement in the *Commercial and Financial Chronicle,* or the monthly statement in the Federal Reserve Bulletin.]

580. Comparison of Banking in United States and Germany

When deposits increase in German banks, we may be reasonably certain that they have more money to lend, and that, when they make loans, they are obliged to pay out more money or notes. When American banks have more deposits, it usually means that they have already increased their loans.—[Sprague, Banking Reform in United States, p. 37.]

(a) Explain the above quotations. (b) How do you account for the difference in the effect of loans in American and German banks? (c) To which would the English system correspond more closely? The French system? Why?

581. Composition of German Currency, July 31, 1926

(In millions of Reichsmarks)

	June 30, 1926	July 31, 1926
Reichsbank notes	2,963.2	3,096.4
Rentenbank notes	1,387.8	1,363.4
Coins (silver and small coin)	646.6	658.9
Notes of private issuing banks	171.8	163.1
	5,169.4	5,281.8

(a) Compute the per cent distribution. (b) Which of these items are elastic? (c) From the Federal Reserve Bulletin, get the total amount of monetary gold in Germany and compute the basic ratio of gold to paper money issues.

582. Statement of the Reichsbank, July 15, 1926

Assets		Liabilities	
Reichsbank shares in portfolio	177,212,000	Capital:	
Gold bullion—German and foreign gold coins at the rate of 1392 Reichsmark per £1	1,492,304,000	(a) Shares in circulation	122,788,000
		(b) Shares in portfolio	177,212,000
Foreign currencies admitted as cover	335,447,000	Reserve funds:	
		(a) Legal reserve fund	33,952,000
Other bills and cheques	1,192,509,000	(b) Special reserve fund for future dividend payments	43,133,000
German small coins	110,271,000		
Bank notes of other banks	20,945,000	(c) Other reserves	160,000,000
Loans on collateral	12,896,000	Notes in circulation	2,738,054,000
Securities	89,494,000	Other liabilities due daily	705,623,000
Other assets	693,494,000	Other liabilities	143,810,000

(a) Calculate the ratio of cash reserve to demand liabilities. Does it exceed the legally required reserve? (b) Of the demand liabilities what percentage are bank notes? How does this compare with the federal reserve banks? (c) What items constitute the Bank's secondary reserve? What is the legal requirement as to secondary reserve? (d) Why does the Bank carry so much treasury stock?

583. Causes of the Differences in the Degree of Inflation in France and Germany

Two reasons offered for the fact that the reichsmark declined to zero and the franc only to 3.5 cents are: (1) Inflation increased French revenues faster than its expenditures, but it increased German expenditures faster than its revenues. (2) Germany was compelled to pay reparations whether taxes permitted or not, and deficits had to be covered by note issues; France was under no such necessity. Comment.

584. Inflation of Notes of the Reichsbank

Date 1923	Marks, Note Circulation	Equivalent of Note Circulation in U. S. Dollars*	Number of Marks Equaling One U. S. Dollar	Gold Holdings, Marks
Jan. 6	1,336,500,000,000	$153,697,500	8,695	1,005,000,000
Feb. 7	2,253,963,000,000	61,983,980	36,363	1,005,000,000
Mar. 7	3,871,256,000,000	187,755,910	20,619	1,005,000,000
Apr. 7	5,624,110,000,000	267,145,225	21,052	1,005,000,000
May 7	6,723,070,000,000	183,203,657	36,764	913,909,000
June 7	9,309,532,000,000	121,023,916	76,923	756,914,000
July 7	20,241,750,000,000	91,087,875	222,222	707,000,000
Aug. 7	62,326,659,000,000	19,944,530	3,125,000	596,351,000
Aug. 15	116,402,515,000,000	41,904,905	2,777,778	516,122,000
Aug. 23	273,906,373,000,000	62,998,465	4,347,826	512,122,000
Aug. 31	663,200,000,000,000	69,636,000	9,523,809	510,486,000
Sept. 7	1,182,039,000,000,000	35,461,170	33,333,333	490,000,000
Sept. 15	3,183,681,000,000,000	30,244,969	105,263,157	490,000,000
Sept. 22	8,627,730,000,000,000	50,040,834	172,413,793	470,000,000
Sept. 29	28,228,815,000,000,000	138,321,193	204,081,630	444,000,000
Oct. 6	46,933,600,000,000,000	51,626,960	909,090,909	443,000,000
Oct. 15	123,349,786,603,000,000	30,837,446	4,000,000,000	443,000,000
Oct. 22	524,330,557,246,000,000	11,797,437	44,444,444,444	467,000,000
Oct. 31	2,496,822,908,936,000,000	14,980,937	166,666,666,667	467,000,000
Nov. 7	19,153,087,468,804,000,000	7,661,234	2,500,000,000,000	467,000,000
Nov. 15	92,844,720,742,927,000,000	23,211,180	4,000,000,000,000	467,000,000
Nov. 23	223,927,315,083,796,000,000	44,785,463	5,000,000,000,000	467,000,000
Nov. 30	400,267,640,291,750,000,000	60,040,146	6,666,666,666,667	467,000,000

* At current rates of exchange at the dates named.

(a) What assets of the Reichsbank were inceasing pari passu with this increase of liabilities? (b) Note that the rate of inflation was rapidly accelerated: what is the reason for this acceleration? (c) Calculate the purchasing power in American dollars of a professor in the University of Berlin whose salary was 50,000 marks, at different dates in 1923. How did the State compensate for the declining purchasing power of the salaries it paid? (d) Why did not the value of the total issue in terms of American dollars stay constant or approximately so? Is this changing value a disproof of the quantity theory of money? (e) What became of the gold lost by the Reichsbank? (f) Procure from Hans Kruger, Room 1431, 42 Broadway, New York, a catalog of German securities and money and the rates at which they were revalued in 1925. (g) In 1921 October 20, Germany raised the surcharge on import duties from 900 to 1,900%. What does this mean, and why was it done? (h) On October 21, 1923, a newspaper stated that the "present premium on gold is 3,900,000,000 marks." What does that mean? (i) On February 15, 1923, the Berlin correspondent of the Manchester Commercial Guardian reported that "in all there are 33 printing works and 12 paper mills occupied on this disastrous activity." If the notes outstanding on Nov. 30th were 1,000,000 mark-notes, estimate the amount of paper required to manufacture them.

585. Banking under Inflation in Germany, 1923

The money market, which was fairly easy at the beginning of January, has since been suffering from a very troublesome stringency. Day-to-day money is dealt in at ¼ per cent per diem, or 90 per cent per annum. The pawning of foreign bills, which the Reichsbank is doing its best to prevent, is being effected at 30 per cent per month, or 360 per cent per annum. The new issues of shares and debentures in the past month amounted to a nominal value of 15½ millards, or 693 million marks more than in December. The great rise in security prices, and the soaring commodity prices resulting from the exchange movements, make it extraordinarily difficult for banks and commercial houses to finance their holdings. Numbers of the smaller banks are unable any longer to obtain credit from the larger banks, with the natural result that holdings have to be realized in the security and bill markets, as in the past week. The Reichsbank is trying gradually to bring down the price of foreign bills by throwing them on the market, using, it is stated, bills which it had accumulated towards the end of last year in order, in due course, to carry out the stabilisation of the mark as had been planned. On Saturday it threw on the market, through the firm of Mendelssohn, the sum of £500,000—a very large amount for Berlin.—[From a newspaper, 1923.]

(a) Why in a period of inflation is the money market tight? Does not the increase in the quantity of money add to the supply of loanable funds and reduce the rate? (b) Account for the extremely high

rates of interest prevailing. If the volume of money were doubling monthly in circulation, suggest a rate of interest which would be fair to borrower and lender. (c) Why should security prices be soaring? Does inflation of circulating notes tend to raise the value of stocks? of bonds? of real estate? (d) Describe the efforts of the Reichsbank to stop the decline of value of the mark.

586. Competition of Reichsbank and Private Banks

The Reichsbank has for some time been complaining that some of the private banks of issue have been violating the clause in the bank law which forbids their charging less than the Reichsbank discount rate so long as the rate is 4% or over, and that the Reichsbank has been injured thereby. It appears that in some cases the practice has been followed of partially discounting bills and partially advancing against them (at a lower rate of interest). The new law (1920) provides that the private-note banks must agree not to make advances at less than the discount rate after January 1, 1925.—[U. S. Commerce Reports, 1920.]

(a) Is it not the common practice of the Reichsbank to keep its discount rate above the market rate? Why is the provision made that private banks cannot employ a rate lower than the Reichsbank if the rate is 4% or more? (b) Does the Bank of England require the support of statutory law to enforce its discount rate policy?

587. Statements of the Three Leading German Banks

(In millions of marks)

Dec. 31	Capital	Reserve	Deposits	Loans	Cash & Bank Bal.	Bills	Investments	Participations	Acceptances
The Deutsche Bank									
1913	200	112	1,580	1,088	189	639	161	135	300
1914	250	178	2,042	1,327	357	676	172	113	162
1915	250	178	2,541	1,406	408	1,018	167	113	122
1916	250	180	3,503	1,609	498	1,661	165	102	69
1917	275	225	5,669	1,883	1,006	3,053	253	69	65
1918	275	230	6,740	1,686	751	4,616	242	63	71
The Dresdner Bank									
1913	200	61	958	860	130	375	42	92	287
1914	200	61	948	692	161	330	52	101	146
1915	200	61	1,192	806	205	353	65	98	92
1916	200	62	1,759	920	293	708	55	91	68
1917	260	80	2,947	1,404	532	1,200	81	118	75
1918	260	80	4,150	1,381	496	2,370	148	118	63
Disconto-Gesellschaft									
1913	200	81	674	630	120	257	30	175	260
1914	300	118	805	546	142	361	39	282	153
1915	300	118	1,262	614	224	688	44	270	100
1916	300	120	1,644	678	284	831	60	261	44
1917	310	134	2,870	984	449	1,618	77	259	68
1918	310	134	3,649	1,204	611	1,975	96	269	68

(a) The German banks are the financial backers and often the silent partners of large industrial undertakings. Note that a large part of the banks' capital is tied up in "participations" in other concerns. What differences of policy are evident with respect to "participations" among the three banks? (b) During the war many of the smaller banks were merged into these larger banks: why? How did it affect their deposits? How did inflation affect their deposits? (c) "The German banks have contributed to German industrial development most positively by forming stock companies for all sorts of enterprises, by granting long-time credits, purchasing shares and bonds, marketing new securities by direct sales to private investors, and by making markets on the Berlin Boerse." Contrast these practices with the practices of the English and American commercial banks. What differences in basic theory underlie the two systems? (d) Account for the fact that "capital" did not increase as fast as "deposits" or "bills" during the war. Why did "acceptances" decline?

588. German Currency Circulation

(In millions of Reichsmarks)

	July 23, 1914	Oct. 31, 1924	Oct. 31, 1925
Reichsbank notes	1,891	1,781	2,803
Notes of private banks	150	3	190
Notes of the Reichskassen	100	.....	.....
Rentenbank notes	.....	1,720	1,543
German gold coins	2,750	.....	.....
Other German coins	850	329	547
Hamburg emergency currency (gold secured)	.....	42	.....
Total	5,741	3,870	5,082

[Report of the Agent General for Reparation Payments, November 30, 1925.]

(a) The Reichsbank this year kept the Reichsmark at par by offering to buy or sell dollars at par of exchange: explain. (b) The Rentenbank notes are being gradually retired: what is the Rentenbank? (c) The notes of the private banks are fixed by law at a percentage of the total circulation: does the above proportion approach the legal limit? (d) How does the German price level compare with the level of 1914? (e) What effect does the loss of territory as a result of the war have on the need for bank notes?

589. Summary of the Dawes Plan

The following summary of the Dawes Plan for the payment of reparations was prepared under the direction of Mr. Fred I. Kent, Chairman of its Commission on Commerce and Marine, for the American Bankers Association and shows briefly the details of the plan.

Summary of the Dawes Plan—Problem 589

Years	Budget	Interest from Railroads	Loan	Transport Tax	Industrial Debentures Interest	Total
1924–25	Balanced (If free from peace treaty charges.)	330,000,000 gold marks (200,000,000 gold marks of this sum are to be used for treaty payments, the remainder to be held until the following year.)	800,000,000 gold marks			1,000,000,000 gold marks
1925–26	250,000,000 gold marks (Obtained from the sale of preference shares of railroads or, if this fails, from an internal loan.)	465,000,000 gold marks And in addition the sum held over from the previous year, viz.: 130,000,000 gold marks		250,000,000 gold marks	125,000,000 gold marks	1,220,000,000 gold marks
1926–27	110,000,000 gold marks	550,000,000 gold marks		290,000,000 gold marks (The transport tax should increase materially within a few years. This sum shall go for reparations and the balance to the German government.)	250,000,000 gold marks	1,200,000,000 gold marks (See Note 1)
1927–28	500,000,000 gold marks (Subject to addition or reduction in certain contingencies, i.e., controlled revenues.)	660,000,000 gold marks		290,000,000 gold marks (Any excess received from this tax, over this sum, shall go to the German government.)	300,000,000 gold marks	1,750,000,000 gold marks (See Note 1)
1928–29 Standard (See Note 2)	1,250,000,000 gold marks (Subject to addition or reduction in certain contingencies.)	660,000,000 gold marks		290,000,000 gold marks (Any excess received from this tax, over this sum, shall go to the German government.)	300,000,000 gold marks	2,500,000,000 gold marks (See Note 2)

NOTE 1. If controlled revenues for 1926–27 exceed 1,000,000,000 marks (or for 1927–28 exceed 1,250,000,000 marks) one-third of the excess, but not exceeding 250,000,000 marks, is to be added to the payment from the budget for that year. On the other hand, if controlled revenues for 1926-27 are less than 1,000,000,000 marks (or for 1927–28 are less than 1,250,000,000 marks), then one-third of the deficiency, but not exceeding 250,000,000 marks, is to be subtracted from the payment from the budget for that year.

NOTE 2. 1929–34 inclusive: Yearly payments of 2,500,000,000 marks from same sources as in 1928–29, plus such a percentage of 1,250,000,000 marks as the "index of prosperity" indicates is possible of payment. 1934–35 and subsequent years: Yearly payments of 2,500,000,000 marks from the same sources as in 1928 29, plus such a percentage of 2,500,000,000 marks as the "index of prosperity" indicates is possible of payment.

Bank of Issue

A bank of issue is to be established with a capital of four hundred million gold marks, which shall be in shares of 100 marks each. One million shares are to represent assets of the Reichsbank and three million shares for subscription in Germany and abroad. All shares shall be alike and after the initial subscriptions no restriction shall be imposed upon their purchase or sale. All shares shall be paid for entirely in gold or foreign bills at their current gold values. The prime purposes for the creation of the bank will be to give to Germany a unified and stable currency and for reparation payments.

Other chief functions of the bank will be:

1. To issue notes on a stable basis in relation to gold with an exchange privilege for gold.
2. To serve as a banker's bank dealing in prime short-time paper and so establishing the final rate of discount. It will also act as a bank for the public.
3. To act as a government bank but free of government control: advances to government to be strictly limited and are placed under the control of the Commissioner.
4. To hold on deposit reparation payments.
5. It will be directed by a German president and a Managing Board which can be assisted by a German consultative committee.
6. The due observance of its statutes will be further safeguarded by a general board, of which half of the members, including a commissioner, will be foreign.

Issuance of Bank Notes

A. The bank shall have the exclusive right of issuing and circulating bank notes in Germany during the period of its charter (50 years).

B. Neither the German Government nor any German State bank shall have the power to issue paper money, with the exception of the banks of Baden, Bavaria, Saxony and Wurtemburg, which shall retain their charter of issue for sums not to exceed their present local quota.

C. The government shall not issue any coins for circulation except gold coins containing approximately their full value in gold metal. All coins other than gold issued by the government shall be issued through the bank.

D. The bank may issue notes for circulation against gold coin or bullion. Presumably the law creating the bank is expected to cover any further necessary details.

Reparation Payments

All reparation payments are to be made through the bank of issue. These payments, fixed on a sliding scale, run from one billion two hundred twenty million gold marks in 1926, to two billion five hundred million gold marks in 1934, subject to addition or reduction in certain contingencies: i.e., controlled revenues (see notes 1 and 2 under table). In order to prevent these payments from affecting adversely Germany's financial stability an index of prosperity has been fixed, making it possible to judge whether the amounts of the scheduled payments are not beyond her capacity to pay.

The Index of Prosperity

1. Total German exports and imports taken together.
2. Total of budget receipts and expenditures taken together, including those of Prussia, Saxony and Bavaria after deducting from both sides amount of peace treaty payments included in the year.
3. Railroad traffic as measured by statistics of weight carried.
4. Total money value of the consumption of sugar, tobacco, beer and alcohol within Germany, measured by prices actually paid by the consumer.
5. Total population of Germany computed from last available census data, vital statistics and emigration records.
6. Consumption of coal and lignite reduced to coal equivalent per capita.

Transfer of Reparation Payments

All payments for the account of reparations are to be deposited in the bank of issue to the credit of the "Agent for Reparation Payments." The use and withdrawal of the moneys so deposited will be controlled by a committee consisting of the "Agent for Reparation Payments" and five persons skilled in matters relating to foreign exchange and finance representing five of the allied and associated powers. This committee will regulate the execution of the program for deliveries in kind and the payments under the Reparation Recovery Act in such a manner as to prevent difficulties arising with the foreign exchange. They will also control the transfer of cash to the Allies by purchase of foreign exchange and generally so act as to secure the maximum transfers without bringing about instability of currency. If the payments by Germany on reparation account, in the long run, exceed the sums that can be thus transferred, such payments will, of course, begin to accumulate in the bank. When such accumulation amounts in normal circumstances to two billion gold marks the committee will find employment for additional accumulation up to five billion gold marks in bonds or loans in Germany. When this accumulation, including deposit bonds and loans, amounts to five billion gold marks then further reparation payments by Germany cease until such time as the transfer of the accumulated fund is possible and this accumulation is reduced, when they are again resumed. In the event of concerted financial maneuvers either by the German Government, or by any group, to prevent transfers of funds, the Transfer Committee is empowered to accumulate funds in excess of the five billion gold mark limit and to employ the sums to its credit in the purchase of any kind of property in Germany.

Mortgage of German Railroads

Germany's railroads, estimated to be worth twenty-six billion gold marks with a net earning capacity as high as one billion gold marks yearly, were found to be an available means for securing reparation payments and aiding German finances. The experts propose a blanket mortgage of eleven billion gold marks on the entire German railroad system, bearing 5% interest with 1% sinking fund annually.

In addition to eleven billion of bonds, the railroads are to have a capital of two billion of preference shares and thirteen billion common

stock. One and one-half billion of preference shares are to be sold to private persons, and the remainder—five hundred million preference shares and all of the common stock—is to go to the German Government to be kept or sold by it at its option. The preference shares are to bear a fixed rate of dividend and are to participate in the profits after the payments for interest are made. These shares are to be sold by the company for the profit of the German Government and of the company itself.

Mortgage on Industry

German industry under the plan is expected to provide five billion gold marks represented by first mortgage bonds bearing the same rate of interest as the railroad bonds. This amount, the experts explain, is less than the total debt of the industrial undertakings in Germany before the war.

The interest on these bonds will be paid on a progressive scale, beginning the second year with 2½%, 5% the third year, and 5%, plus 1% sinking fund, the fourth year.

Default of Interest Payments

In the event of default of payment of the interest or the sinking fund or principal upon either railroads or industrial bonds, provision is made for the recovery of the deficiency from the German Government through the commissioner of Controlled Revenues.

Controlled Revenues

It is recommended that certain specific revenues be assigned to and under the control of Germany's creditors. These revenues, to furnish a collateral, but not a primary, security, which the Committee recommended should be the taxes on customs, alcohol, tobacco, beer and sugar.

Organization

The plan provides for a Commissioner of the Bank of Issue, a Commissioner of Railways and a Commissioner of Industrial Debentures. In addition provision is made for an Agent for Reparation Payments. It is suggested that the latter shall act as the agency between the Reparation Commission and the various commissioners. In case of a difference of opinion between one commissioner and the agent, the commissioner can appeal to the Reparation Commission.

The plan also provides for the appointment of a trustee with the following duties:

1. He will receive and administer the railway and industrial bonds and will be accountable to the Reparation Commission.
2. He will insure the service, interest and amortization of the railway and industrial bonds by means of funds remitted to him for this purpose.
3. He will fix the conditions of the amortization of the bonds.
4. With the authorization of the Reparation Commission and for its benefit, he may sell the bonds which he holds and may use the mortgage

bonds and deeds which he holds to secure new securities which he may himself issue.

SUMMARY

Summarizing the proceeds from all the provisions in the plan for treaty payments, the experts estimate that they will produce one billion gold marks the first year, one billion two hundred and twenty million the second year, one billion two hundred million the third year, one billion seven hundred and fifty million the fourth year, two billion five hundred million, the maximum payment to be required from Germany annually, the fifth year, and thereafter, as explained in Notes One and Two under the table.—[*Acceptance Bulletin,* June, 1924.]

(a) Get copies of the Annual Reports of the Agent General of Reparation Payments and determine the degree to which the Dawes Plan was put into operation and how it is working.

590. Cash Reserves of Canadian Banks

Section 60, Consolidated Canadian Bank Act, Revised Statute of Canada, 1906, provided:

1. The bank shall hold not less than forty per centum of its cash reserves in dominion notes.
2. The minister shall make such arrangements as are necessary for ensuring the delivery of dominion notes to any bank in exchange for an equivalent amount of specie at the several offices at which dominion notes are redeemable in the cities of Toronto, Montreal, Halifax, St. John, Winnipeg, Victoria, and Charlottetown, respectively.
3. Such notes shall be redeemable at the office for redemption of dominion notes in the place where the specie is given in exchange.

(a) What is the minimum legal reserve required for Canadian banks? (b) What are the requirements for federal reserve banks in the United States, joint stock banks in England, and the Bank of France? (c) Why should the system in Canada differ so much from the practice in this country? (d) What are Dominion notes? Wherein are they different from the Canadian bank notes? Are the Dominion notes elastic?

591. Effect of Number of Branches on Security of Depositors

It is a fact that in Canada there are more bank branches per capita than there are banks per capita in the United States; the cost of operating a branch is so much less, especially under the note issue system of Canada, that it is possible to operate them successfully in smaller communities than is it possible to operate an independent bank. In the very thinly spread population of Canada, with very small towns with great reaches between them, the possibility of maintaining suc-

cessfully a banking institution in these places is very desirable. But the important thing to note is that with this extension the character of the management does not decline as it necessarily must when independent banks extend to smaller and smaller places; the loan policy is dictated by the home office, the investments are made by the home office, which is distant and removed from the pressure of personal considerations in extending loans and making investments and which is expert in investments. The greater possible number of branches (greater than the number of independent banks would be) might mean as great competition as would prevail among the unit banks, but the dangers on the loans and investments side would be less, and this is the grand consideration in banking. In Canada, England, etc., where branch banking exists the banks have not planted branches with a free hand in a mad scramble to outdo one another; whenever competition has become too intense the tendency is to consolidation, just as in the case of chain stores; but this consolidation has nowhere led to monopoly, but rather to moderated competition.

(a) Is this a valid statement of the case? (b) Does the wider geographical distribution of the bank's branches bring stability and security? (c) If branch banking were adopted by, say, the state of Iowa, allowing branches anywhere within the state, would as much greater security be attained by geographical distribution as in Canada where a bank may establish branches anywhere throughout Canada?

592. Provisions for Excess of Bank Notes in Canada, 1908

The third of these measures suggested by the expanding business of the banks was not passed until 1908. For some years, however, a need for it had appeared, in the closeness with which the circulation of a number of the banks, notwithstanding large increases of paid-up capital, had approached the legal limit in the active season of autumn. It was now enacted that in the crop-moving time of any year—from October 1 to January 31 of the following year—a bank might issue notes in excess of its unimpaired paid-up capital and rest account (surplus) as shown by the monthly return to the government. (7-8 Edw. vii, chap. 7.) As price for the privilege of overissue, any bank taking advantage of the amendment was required to pay interest upon the excess, at a rate not to exceed 5 per cent per annum, to be fixed by the governor in council.—[R. M. Breckenridge, The History of Banking in Canada, National Monetary Commission, Washington, 1910, p. 147.]

(a) What conditions in 1907 lead to this legislation in 1908? (b) Why is the seasonal variation in the demand for currency greater in Canada than in the United States? (c) What is the logic of limiting the issue of excess notes to 15% of the paid-up capital and surplus? of imposing a high tax?

593. Ninety-fifth Annual Report of The Bank of Nova Scotia

CAPITAL PAID-UP $10,000,000
RESERVE FUND $19,500,000

PROFIT AND LOSS

Balance December 31st, 1925	$ 450,644.39
Net Profits for year, losses by Bad Debts estimated and provided for	2,243,242.99
	$ 2,693,887.38
Dividends for year at 16%	$ 1,600,000.00
War Tax on circulation to December 31st, 1926	100,000.00
Contribution to Officers' Pension Fund	85,000.00
Written off Bank Premises Account	250,000.00
Balance carried forward December 31st, 1926	658,887.38
	$ 2,693,887.38

GENERAL STATEMENT AS AT DECEMBER 31ST, 1926

LIABILITIES

Capital Stock paid in		$ 10,000,000.00	
Reserve Fund		19,500,000.00	
Balance of Profits, as per Profit and Loss Account		658,887.38	
Dividends declared and unpaid		402,476.00	
			$ 30,561,363.38
Notes of the Bank in circulation		$ 14,981,152.95	
Deposits not bearing interest	$ 36,577,191.84		
Deposits bearing interest, including interest accrued to date	153,805,050.24	190,382,242.08	
		$205,363,395.03	
Balances due to other Banks in Canada		1,868,971.73	
Balances due to Banks and Banking Correspondents in the United Kingdom and foreign countries		1,104,189.30	
Bills Payable		1,269,719.90	
			209,606,275.96
Letters of Credit outstanding			6,328,068.14
Other Liabilities not included in the foregoing			225,876.89
			$246,721,584.37

ASSETS

Current Coin	$ 9,117,818.14
Dominion Notes	18,890,348.50
United States and other foreign currencies	1,750,775.78
Notes of other Banks	990,685.17
Cheques on other Banks	11,223,626.96
Balances due by Banks and Banking Correspondents elsewhere than in Canada	3,482,096.68
	$ 45,455,351.23
Deposits in the Central Gold Reserves	6,000,000.00
Dominion and Provincial Government securities, not exceeding market value	31,463,978.32
Canadian municipal securities and British, Foreign and Colonial public securities other than Canadian, not exceeding market value	10,293,500.20
Railway and other bonds, debentures and stocks, not exceeding market value	12,491,890.15
Call and short (not exceeding thirty days) loans in Canada on stocks, debentures and bonds and other securities of a sufficient marketable value to cover	19,380,733.39
Call and short (not exceeding thirty days) loans elsewhere than in Canada on stocks, debentures and bonds and other securities of a sufficient marketable value to cover	11,308,375.41
	$136,393,828.70

Other current loans and discounts in Canada (less rebate of interest) after making full provision for all bad and doubtful debts	$ 75,944,208.49
Other current loans and discounts elsewhere than in Canada (less rebate of interest) after making full provision for all bad and doubtful debts	19,732,839.27
Liabilities of Customers under Letters of Credit, as per contra	6,328,068.14
Non-current loans, estimated loss provided for	373,342.46
Bank Premises at not more than cost, less amounts written off	7,175,201.40
Real Estate other than Bank Premises	40,923.78
Deposit with the Minister of Finance for the purposes of the circulation fund	488,026.57
Other assets not included in the foregoing	245,145.56
	110,327,755.67
	$246,721,584.37

G. S. Campbell, President — J. A. McLeod, General Manager

AUDITORS' REPORT TO THE SHAREHOLDERS:

We have examined the above General Statement of Liabilities and Assets as at December 31st, 1926, and compared it with the books at the Chief Office and with the certified returns from the Branches. The Bank's investments and cash on hand at the Chief Office and at the Toronto and Montreal Branches were verified by us at the close of business on December 31st, 1926. We have obtained all the information and explanations that we have required, and in our opinion the transactions of the Bank which have come under our notice have been within the powers of the Bank.

We certify that in our opinion the above statement discloses the true condition of the Bank and is as shown by the books of the Bank.

D. McK. McClelland, F.C.A., of Price, Waterhouse & Co.
H. T. Jamieson, F.C.A., of Riddell, Stead, Graham & Hutchison } Auditors.

Toronto, Canada, 15th January, 1927.

303 Branches throughout Canada, Newfoundland, Cuba, Jamaica, Porto Rico, Dominican Republic, and in Boston, Chicago, New York and London, England. Commercial and Travelers' Credits issued, available in all parts of the world. Bills on Canadian, Newfoundland and West Indian points favorably negotiated or collected by our Branches in the United States.

NEW YORK

Peter W. Murphy, Fred W. Murray, } Agents, 49 Wall Street

(a) What is the ratio of "Net profits for year" to the sum of the "Capital Stock paid in," the "Reserve fund," the "Balance of Profits"? How does this figure compare with earnings of a United States bank of similar size? (b) What is the ratio of "Notes in circulation" to "Deposits not bearing interest"? to total deposits? Do the notes of this Bank constitute a relatively higher liability than do notes of a national bank in the United States of similar size? (c) Why are "Balances due to other banks in Canada" so small? What is the ratio of bank balances to individual balances? Calculate the similar ratio in case of the Hanover National Bank of New York, or some other New York bank? Why are these ratios so disparate? (d) What items among the assets constitute the reserve of the Bank? What is the security behind the Dominion notes? (e) Should the ratio of "Cheques on other banks" to "Notes on other banks" be comparable with the ratio of "Total deposits" to "Notes in circulation"? (f) Distinguish between the items "Deposits in the central gold reserves" and "Deposit with the Minister of Finance for the purposes of the circulation

fund." (g) What is the point in dividing the assets into three groups, the totals being respectively $45,455,351.23, and $136,393,828.70, and $110,327,755.67? (h) What proportion of its assets is invested in securities? What types of securities does the Bank hold? (i) Where does the Bank place most of its call loans? Why? (j) Does the item "Letters of credit outstanding" constitute an important element of its liabilities? Does this mean that the Canadian bank's business is similar in method to that of a national bank in the United States? (k) Note the location of its branches. Suggest reasons for the location of each.

594. Revision of the Canadian Bank Act

The charters of Canadian banks expire on July 1st, 1923. Under the law these charters are granted for ten years and renewed at the end of each decennial period, this plan permitting of revision of the Banking Act at fixed dates in such respect as experience of its working makes desirable. In ordinary course the Act will be reviewed and the charters extended at the next session of the Dominion Parliament, and it is in anticipation of this legislation that the following articles have been prepared. . . . The Act has been revised five times since Confederation, and in every instance the amendments have sought security for depositors and noteholders. Granting credits is the province of bank managers. At times losses arise from loans, and the solvency of a bank may be jeopardized by imprudent advances, but legislation cannot furnish a complete safeguard against such occurrence. The public concern in strong and stable banks arises out of deposits made and notes accepted, and it is obviously the duty of Parliament to hedge banks with restrictions designed to protect noteholders—who are involuntary creditors—and in lesser degree depositors who entrust their savings to these institutions. The existing Bank Act conforms to this requirement. . . .

Banks are limited by law to certain classes of loans, the purpose of the restrictions being to prevent employment of resources in what are termed "frozen credits." The making loans, however, must necessarily be a matter of judgment of bankers, since Parliament can neither pass judgment upon the value of commercial paper, nor direct the disposal of loanable funds.—[Banks and Banking, Pamphlet issued by the Canadian Bankers Association, 1923, pp. 3-4.]

(a) What, if any, arguments can you give for reviewing the Bank Act once in each decade? (b) Do any of the following countries follow the same policy: England, France, Germany, or United States? (c) What are "frozen loans"? How may banks avoid frozen loans? Will a more rigid banking law and government inspection of banks prevent such extensions of bank credit? (d) When is the next date for reviewing the Bank Act?

595. The Bank Circulation Redemption Fund

Parliament provided in the 1891 revision of The Bank Act for the creation of a redemption fund to retire the notes of a bank becoming

insolvent. This fund, which is held by the Finance Department, is made up from the contribution by all the chartered banks of 5 per cent. of their circulation, and now amounts to $6,442,000. It is provided in the Act that from the day of suspension of a bank until the date fixed for the redemption of its outstanding notes these notes will bear interest at the rate of 5 per cent. per annum, and in the event of assets of the insolvent bank not sufficing to retire its note circulation, the Redemption Fund in the hands of the Government is to be drawn upon for that purpose.

The effect of this legislation is to put the whole of the assets of all the Canadian banks behind the notes of any one bank so unfortunate as to suspend payment. It becomes, in fact, immaterial to the noteholder whether or not the issuing bank has closed its doors, because in practice he has been able to walk into any bank in Canada and exchange the note of a failed institution for the note of a solvent institution, if he so desired, or he could keep the note and collect 5 per cent. interest thereon until the day fixed for redemption. Since 1891 a Canadian bank bill has never fallen below par in Canada, and in no contingency is such happening to be apprehended. The bank bill is as good as the credit of the country.—[Banks and Banking, Pamphlet issued by the Canadian Bankers Association, 1923, pp. 35-36.]

(a) Is this a case of mutual guarantee of the notes of the banks? Why could they not equally well guarantee the deposits of the banks? (b) Why should the money in the safety fund bear interest and who pays it? (c) Is prior lien on the general assets a necessary feature of a system of guarantee of bank notes by the issuing banks? (d) Why is it advisable to limit the amount of assessment to replete the safety fund to say, 1% of the bank's circulation in any year? Is it a protection to the depositors or to the shareholders of the assessed bank?

596. Elasticity of Canadian Bank Note Circulation

The following figures illustrate the range of the bank note circulation during each of the last five pre-war years:

	Lowest	Highest	Percentage of Difference
1909	$65,819,067	$ 89,633,549	36.2
1910	73,378,676	95,992,866	30.8
1911	77,110,971	105,855,021	37.3
1912	88,065,521	115,473,098	31.1
1913	94,575,644	119,497,321	26.4

The degree in which the bank note circulation has met the expanding and subsequent contracting needs of business in general during the last few years is shown by the following table:

	Lowest	Highest	Percentage of Difference
1918	$171,674,464	$234,982,978	36.9
1919	203,424,472	237,547,162	16.7
1920	216,691,916	249,165,707	15.0
1921	181,953,001	207,417,917	14.0
1922	155,652,145	178,623,690	14.7

The following figures of our total bank note issues over a series of years afford an illustration of the growth of Canada:

	Amount
Dec. 31, 1867	$ 8,851,451
Dec. 31, 1870	18,526,212
Dec. 31, 1880	27,328,358
Dec. 31, 1890	35,006,274
Dec. 31, 1900	50,758,246
Dec. 31, 1920	228,758,587
Dec. 31, 1922	176,201,351

There are various misconceptions about the power of note issue granted to the banks, which it seems desirable to dispel. Many think that the money lent by a bank comes largely from its note issue, and upon the notion that each dollar of note issue is thus lent, build up a vast imaginary profit. The money lent by one of the larger banks comes from its deposits, its share capital and rest fund, and its note issue, in the proportion of 86 cents from deposits, 8 cents from shareholders' funds, and 6 cents from note issue, for each dollar lent.—[Walker, Sir Edmund, Canadian Banking, Canadian Bankers' Association, Toronto, 1923, pp. 25-26.]

(a) Why should the note issue of Canada fluctuate so widely? (b) What provisions have been made in the Canadian banking laws to meet this situation? (c) Compare the last five pre-war years with the period 1918 to 1922 inclusive. (d) Do you agree with the statements contained in the last paragraph of this quotation? Why?

597. Causes of Fall of Lira

Former Italian Finance Minister, di Stefani, in a recent article expresses the view that only a continuous reduction of State note issues will bring about a healthy economic condition in Italy. Therefore, his formula seems to be to cut down outstanding note issues still more rapidly and the lira will be strengthened accordingly.

This program of accelerated deflation might be regarded with more hope if there were any reason to believe that the recent weakening of the lira had any connection with note issues. In fact, the lira has been falling, while note issues have been contracting. Di Stefani himself puts his finger upon one of the chief reasons for deteriorating exchanges, which lies in the heavily adverse foreign trade balances. The lira is being affected

by causes that are not confined to Italy alone. Consequently more than a policy of domestic deflation is required to support its value abroad.—[Editorial—*Journal of Commerce*, June 23, 1926, by permission]

(a) Explain the normal expectation of the effect of deflation on exchange rates and on economic condition of the country. (b) Why does the editor not believe the policy of deflation will bring about the ends sought? (c) What possible "causes that are not confined to Italy alone" may he have had in mind?

598. How Consolidation of Note Issue Affected Statement of Banca d'Italia

In July the Banca d'Italia took over the note issue of the banks of Naples and Sicily. Compare the following statements to note the effect.

(000 omitted)

ASSETS

	Lire July 31	Lire June 30
Gold in hand (lire gold)	1,135,510	893,697
Gold abroad	419,614	381,414
Silver in hand	105,613	85,642
Other balances	285,896	273,457
Total reserves	1,946,633	1,634,210
Inland bills (lire paper)	6,160,444	5,972,595
Advance to treasury	6,729,411	5,240,064
Other advances	2,856,921	3,039,665
Special credit industries	3,408,516	2,618,618
Investment (government securities)	357,144	357,715

LIABILITIES

Notes in circulation (lire paper)	18,327,693	14,098,586
Public deposits (treasury)	1,321,000	1,970,400
Other deposits and drafts	2,310,604	1,627,693

(a) What effects are evident in the bank statement? (b) Calculate the per cent reserves carried. (c) Comment on the distribution of the assets of Banca d'Italia. (d) The circulation of the three banks of issue at the end of June was composed as follows:

On account of trade (lire)	8,192,567,736
Consortium for industry	3,420,776,957
On account of treasury	6,729,411,855
	18,342,756,550

Explain these classes.

599. Credito Italiano

STATEMENT, 30TH NOVEMBER 1926

ASSETS

Callable Capital	Lit.	45.591.300,—
Cash	"	412.612.310,80
Bills receivable (including Treasury Bills)	"	2.699.101.539,90
Loans against Collateral Securities	"	300.532.371,85
Current Accounts	"	1.689.602.750,55
Debtors on Acceptances	"	351.879.876,70
Investments	"	232.293.976,70
Participations	"	217.084.269,35
Freehold Bank Premises	"	12.500.000,—
Sundry Debtors	"	157.414.840,70
Customers' Liabilities and Securities against Guarantees	"	364.805.488,35
	Lit.	6.483.418.724,90

LIABILITIES

Capital	Lit.	400.000.000,—
Reserve Fund	"	150.000.000,—
Deposits & Savings Accounts	"	966.417.261,90
Current Accounts	"	3.950.579.475,40
Acceptances on Account of Customers	"	351.879.876,70
Cheques Outstanding	"	167.326.896,—
Sundry Creditors	"	81.169.515,45
Guarantees on Account of Customers	"	364.805.488,35
Profit ex 1925	"	4.468.025,50
Profits	"	46.772.185,60
	Lit.	6.483.418.724,90

CROSS ACCOUNTS:

Securities belonging to Clerks' Provident Fund	Lit.	33.271.824,60	
Securities deposited as Collateral	"	3.968.362,—	
Securities deposited for Safe Custody	Lit.	3.445.851.962,—	" 3.483.092.148,60
			Lit. 9.966.510.873,50

CROSS ACCOUNTS:

Clerks' Provident Fund	Lit.	33.271.824,60	
Depositors of Collateral	"	3.968.362,—	
Depositors for Safe Custody	"	3.445.851.962,—	" 3.483.092.148,60
			Lit. 9.966.510.873,50

CAPITAL PAID UP AND RESERVE L.IT. 504.408.700

Registered Office—GENOA
Head Office —MILAN

Branches

Acireale, Arezzo, Asti, Bari, Barletta, Bergamo, Biella, Bologna, Bolzano, Brindisi, Cagliari, Carrara, Castellammare di Stabia, Catania, Catanzaro, Chiavari, Chieti, Civitavecchia, Como, Ferrara, Firenze, Fiume, Foggia, Forli, Frattamaggiore, Genova, Iglesias, Imperia, Lecce, Lecco, Livorno, Lucca, Messina, Milano, Modena, Molfetta, Monopoli, Monza, Napoli, Nervi, Novara, Oristano, Padova, Palermo, Parma, Pinerolo, Pisa, Roma, Sampierdarena, S. Giovanni a Teduccio, Sassari, Savona, Spezia, Taranto, Torino, Torre Annunziata, Torre del Greco, Trento, Trieste, Udine, Varese, Venezia, Vercelli, Verona, Voghera.

LONDON: 2, Royal Exchange Avenue E. C. 3
NEW YORK, Representative Office: 63 Wall Street

(a) How does the Credito Italiano rank among the banks of Italy? (b) With what warrant does it list its "Callable capital" among its assets? (c) What is meant by "cross accounts"? Why are they

separated from the other items of the statement? (d) Distinguish between "Current accounts" appearing on the assets side and on the liabilities side of the statement. (e) What is meant by "Participations" among the assets? (f) Is it well to list the "Treasury bills" among the "Bills discounted"? (g) What liability counterbalances "Debtors on acceptances"? Explain. (h) What is the nature of the business under "Guarantees on account of customers"? (i) With a map study the geographical distribution of the branches of the Bank.

600. Banca d'Italia

Capitale nominale ..... L 240,000,000
Id. versato 180,000,000

Situazione al 20 Agosto 1926

ATTIVO

Riserva e Cassa	Oro	L. 1,135,996,924 65	1,135,996,924 65
	Argento (divisionale L. 7,409,327.00)	" 103,894,757 30	103,894,757 30
	Cambiali sull'estero	L. — —	
	Buoni del Tesoro di Stati esteri	" 28,806,613 70	
	Certificati di credito sull'estero	" 498,564,303 80	
	Certific. di giacenza a pieno titolo equip. a valuta aurea (di cui L. 18,600,000 in monete e verghe d'oro)	" 180,000,000 00	707,408,941 10
	Biglietti di Banche estere	" 38,023 60	
	(di cui L. 310,892,153.68 provenienti dai Banchi di Napoli e di Sicilia.) Totale della Riserva	L. 1,947,300,623 05	
	Monete Somalia d'argento da L. 5 e 10	L.	3,000,000 00
	Biglietti di Stato	"	211,402,420 00
	Titoli nominativi a vista dei Banchi di Napoli e di Sicilia e buoni agrari	"	1,609,390 88
	Biglietti di Banche estere (di cui applicati alla riserva per L. 38,023.60)	"	154,470 05
	Vaglia postali ed altro	"	7,625,080 56
	Argento divisionale non applicato alla riserva e argento non decimale	"	913,347 13
	Rupie d'argento	"	233,548 56
	Monete di nichelio e di bronzo	"	39,489,461 35
	Totale della Cassa	L.	1,504,319,400 48
Portafoglio su piazze italiane		"	5,921,475,041 73
Portafoglio sull'estero (di cui applicato alla riserva per L. 28,806,613.70)		"	32,165,750 00
Effetti ricevuti per l'incasso		"	16,223,425 44
Anticipazioni ordinarie		"	2,507,069,215 91
Credito verso la Sezione speciale autonoma del Consorzio per sovvenzioni su valori industriali		"	3,381,084,593 53
Tesoro dello Stato	Anticipazioni al Tesoro	L. 360,000,000 00	
	Id. straordinarie al Tesoro	" 4,515,000,000 00	
	Id. id. id. per cambio delle valute Austro-Ungariche	" 274,999,999 98	
	Id. id. id. per estinzione Buoni del Tesoro	" 1,000,000,000 00	
	Id. a terzi per c/ dello Stato	" — —	
	C/ somministrazioni di biglietti	" 579,411,855 53	
			6,729,411,855 51
Titoli	per la scorta	L. 24,610,633 20	
	per impiego della massa di rispetto	" 10,262,740 05	
	a cauzione per il servizio di Regia Tesoreria Provinciale Ricevitorie o Casse Provinciali	" 110,206,068 59	
	per impieghi di fondi diversi accantonati	" 4,714,200 00	
	a garanzia dei debiti a vista	" 208,377,728 53	
			358,171,370 37
Conti correnti attivi	nel Regno	L. 405,699,377 52	
	all'estero (di cui applicati alla riserva per L. 498,564,303.80)	" 510,175,306 12	
			915,874,683 65
Azionisti a saldo azioni		L.	60,000,000 00
Immobili destinati alla collocazione degli uffici (di cui L. 46,000,000 di proprietà esclusiva degli Azionisti)		"	97,139,093 15
Servizi diversi per conto dello Stato e delle Provincie		"	7,983,541 52

Partite varie	Fondo di dotazione del Credito Fondiario	L. 30,000,000 00	
	Impiego della riserva straordinaria	" 11,770,000 00	
	Impiego del Fondo Cassa pensioni della Banca d'Italia	" 157,026,911 66	
	Impiego della Riserva speciale di proprietà esclusiva degli azionisti	" 90,665,850 98	
	Titoli p. impiego dei Fondi di accanton. (R. D. 27 sett. 1923, n. 2158)	" 1,205,130,795 31	
	Tesoro dello Stato—Conto interessi a favore della Sezione speciale autonoma del Consorzio per sovvenz. su valori industr.	" 72,869,804 44	
	Certificato di giazenza a pieno titolo equiparato a valuta aurea (applicato alla riserva)	" 180,000,000 00	
	Differenze inerenti alle riserve passate alla Banca dai Banchi di Napoli e di Sicilia	" 1,179,953,331 41	
	Debitori diversi	" 602,552,811 38	
			3,529,969,505 18
Sofferenze dell'esercizio in corso		L.	25,561,427 15
Spese del corrente esercizio		"	246,285,530 59
		L.	25,332,734,434 21
Depositi		"	40,139,801,395 68
TOTALE		L.	65,472,535,829 89
Partite ammortizzate nei passati esercizi		"	85,061,357 60
TOTALE GENERALE		L.	65,557,597,187 49

Passivo

Capitale			L.	240,000,000 00
Massa di rispetto			"	48,000,000 00
Riserva straordinaria			"	12,025,412 33
Circolazione dei biglietti:				
derivante da operazioni della Banca d'Italia:				
per conto del commercio		L. 8,976,322,327 68		
per conto dello Stato		" 5,240,064,422 32		
				14,216,386,750 00
proveniente dai Banchi di Napoli e di Sicilia:				
per conto del commercio		L. 2,292,928,518 65		
per conto dello Stato		" 1,489,347,433 19		
				3,782,275,951 84
Debiti a vista			L.	838,151,512 29
Depositi in conto corrente fruttifero			"	1,496,886,876 91
Conti correnti passivi			"	104,014,382 70
Servizi diversi per conto dello Stato e delle Provincie			"	938,598,103 44
Partite varie	Riserva speciale di proprietà esclusiva degli Azionisti		L. 92,451,766 91	
	Fondo speciale di proprietà esclusiva degli per la costr. e l'acquisto di nuovi edifici ad uso delle Filiali		" 46,000,000 00	
	Sezione spec. autonoma del Consorzio per Sovvenzioni su Valor industriali, Accantonamenti.	art. 3 e 4 R. D. 27 settembre 1923, n. 2158 (Titoli) L. 180,040,000 00	— —	
		art. 3 e 4 R. D. 27 settembre 1923, n. (Parte realizzata) " 175,489,014 20	— —	
		art. 5 R. D. suddetto " 1,025,090,795 31	— —	
		Interessi dovuti dal Tesoro sui rimborsi effettuati " 72,869,804 44	— —	
			1,453,489,613 95	
	Creditori diversi		L. 1,600,540,056 58	
				3,192,481,437 44
Rendite del corrente esercizio			L.	463,914,007 26
Utili netti			"	— —
			L.	25,332,734,434 21
Depositanti			"	40,139,801,395 68
TOTALE			L.	65,472,535,829 89
Partite ammortizzate nei passati esercizi			"	85,061,357 60
TOTALE GENERALE			L.	65,557,597,187 49

1) di cui L. 904,670,550 sostituite con biglietti della Banca d'Italia.

Saggio dello sconto e dell' interesse

Sulle cambiali ed altri effetti di commercio	normale	7 —%
	ridotto (minimo)	6 —%
Sulle anticipazioni sopra titoli, valori e sete	normale	7 —%
	ridotto	—
Sui conti correnti passivi	massimo	4 —%
	minimo	2.50%

(a) Examine the items described as "reserve." With what warrant are the bills of foreign banks, the bonds of foreign states, and foreign currencies regarded as reserve? (b) From the point of view of good banking might the bonds of the Italian government and of the Italian states and cities which are owned by the Banca d'Italia be regarded as reserve? (c) Does the Banca d'Italia help the government in its finances? What are the evidences? (d) Account for the two groups into which the circulation statement is broken? Does the Banca d'Italia have a monopoly of note issue? If so, when did it get this monopoly? (e) Explain "Depositanti," and account for the high proportion the item bears to total liabilities. (f) Calculate the reserve ratio. (g) Account for the differences in the rates of interest and discount cited.

601. International Comparison of Bank Rates of Discount

(a) Has the movement of bank discount rates in various countries been similar? (b) In what countries did the rate go highest? Are these the same countries in which inflation went highest? What relation obtains between these two factors? (c) In which countries are bank rates the more stable?—[Based on Table XV, Mo. Bul. of Stat., League of Nations.]

602. Position of the Austrian National Bank on May 23rd, 1926

Assets

		Schillings
Metal reserve:		
Minted and unminted gold (Price of 1 kg. fine gold = S 4715·—)	18,313.055·29	
Foreign currencies to be assessed according Art. 85 of the Statutes (217,169.417·16 gold Kronen)	491,410.364·74	509,723.420·03
Other assets serving as cover:		
(a) foreign currencies not included in the metal reserve*		64,929.599·98
(b) small coin		1,658.301·94
(c) bills discounted, warrants and other securities		72,260.017·61
(d) secured loans		207.300·—
State debt		183,142.997·14
Buildings, furniture and fixtures		10,931.000·—
Other assets		393,930.144·65
		1.236,782.781·35

Liabilities

Share capital (30,000.000 gold Kronen)		43,200.000·—
Reserve fund		4,552.460·65
Notes in circulation		
Schilling denominations	718,007.930·—	
Krone denominations	26,327.683·98	744,335.613·98
Current accounts and other daily maturing liabilities		87,586.022·72
Other liabilities		357,108.684·—
		1.236,782.781·35

1 Schilling = 0·2117 gramme fine gold = 0·694 gold Krone = 10.000 Kronen.

* Actually only Dollars and Pounds sterling whereof countervalue of S 25,052.560.28 on contango. (—S 1,464.017.69.)

(a) Pick out the earning assets of the Austrian National Bank so far as it is possible. Do they constitute a large proportion of the total assets? How does the Bank earn its way? (b) On what basis are the foreign currencies which are held by the Bank evaluated? (c) Does the law specify the types of "Other assets serving as cover"? With what warrant is each type designated as "cover"? (d) Does the volume of government securities owned constitute an unduly high proportion of the assets? (e) How much more important is note issue than deposit banking in case of this National Bank? (f) How does the size of the present Austrian National Bank compare with that of the Austro-Hungarian Bank before the War? (g) Why are the notes in two denominations, krone and schillings?

603. Conversion of Capital into Gold after Stabilization of Currency in Austria

Name of Company	Krone Capital						New Schilling Capital				Conversion Ratio
	On July 31, 1914			Before the Conversion			Capital	Capital Reserve	No. of Shares	Par Value in Schillings	
	Capital (000,000)	Reserve (000,000)	No. of Shares	Capital (000,000)	Reserve (000,000)	No. of Shares					
Agrarbank für die Alpenlaender				8,000	1,500	8,000,000	800,000	400,000	80,000	10	100:1
A. G. der Pittener Papierfabrik	4	0.52	20,000	4	2.76	20,000	2,000,000	315,560	20,000	100	1:1
Kompass Allg. Kredit und Garantie Bank	2.5	.....	6,250	1,278	11,524.72	3,195,000	2,300,000	923,240	127,800	18	25:1
Pittel's Neffe Negrelli & Co. Bank A. G.				100	3,981.46	500,000	500,000	77,190	50,000	10	10:1
Deutsch-Englisch Kreditbank A. G.				600	.....	1,500,000	120,000	.....	12,000	10	125:1

(a) What principles underly the recapitalization as evidenced by these samples?

604. Course of Polish Bank Credit, 1925-6

Chief Items of the Balance Sheet of the Bank of Poland

(In millions of Zlotys)

Date	Gold Reserve	Foreign Currencies, Bills and Other Claims Abroad	Silver and Minor Coins	Bill-Portfolio	Loans on Securities, Foreign Bills and Short-term Bills Discounted	Non-interest-bearing Advances to Government	Other Assets	Notes in Circulation
10 I 1925	103,7	265,1	24,9	258,7	31,5	27,9	41,7	49 4
10 I 1926	133,7	72,1	0,5	288,1	86,4	50,0	52,1	3[illegible]65,2
30 " "	134,7	78,5	0,6	301,3	73,8	50,0	97,5	448,0

Date	Clearing Accounts: Treasury Cash-Office	Clearing Accounts: Other	Deposits a vista	Liabilities in Foreign Currencies	"Contango" Liabilities	Other Liabilities	Bank Rate	Total Money in Circulation
10 I 1925	34,5	84,0	5,0	12,6	2,2	17,8	10	611,0
10 I 1926	13,1	74,5	26,7	37,7	34,7	29,5	12	771,2
30 " "	1,0	53,4	24,0	48,7	20,3	38,4	12	907,8

Chief Items in Statements of 14 Principal Joint-Stock Banks

(In thousands of Zlotys)

Date	Cash on Hand	Discount	Open Credit	Advances on Term	Current Accounts a Vista	Fixed Deposits	Rediscount
31. I. 1925	14,050	118,610	99,982	1,031	24,271	60,923	68,568
30. VI. 1925	15,520	163,909	154,609	5,702	45,469	65,214	86,097
31. V. 1926	6,481	119,780	157,065	5,687	39,270	40,165	79,903

Average Exchange Rates for Sterling, Dollars, French, Belgian and Swiss Francs and Italian Lire According to Weekly Quotations on the Warsaw Bourse

(In Zlotys)

Period	1 Pound Sterling	1 Dollar	1 Swiss Franc	1 French Franc	1 Belgian Franc	1 Italian Lira
Parity	25,22	5,18	1,00	1,00	1,00	1,00
29. VI.—4.VII. 1925	25,33	5,18	1,01	0,24	0,24	0,18
28.XII.—2.I. 1926	41,01	8,45	1,63	0,32	0,38	0,34
28. VI.—3.VII. 1926	47,43	9,73	1,88	0,28	0,27	0,35

INDEX NUMBERS OF WHOLESALE PRICES AS ESTABLISHED BY THE HEAD STATISTICAL OFFICE

January 1914=100.

Period	General Price—Index Number of 57 Commodities	Index Numbers for single components of cost of living							
		Corn and Vegetable Foodstuffs	Animal Foodstuffs	Colonial Products and Sugar	Hides and Leather	Textile Raw Materials and Fabrics	Metals and Coal	Building Materials	Chemicals and Miscellaneous
January, 1925	119,5	185,8	148,0	109,4	88,7	155,1	127,6	93,0	79,4
January, 1926	142,0	145,9	177,3	152,6	116,3	184,6	156,1	109,4	113,2
June, 1926	174,6	227,5	194,1	185,1	146,2	243,2	188,3	110,8	136,8

POLAND'S FOREIGN TRADE

Period	Value in Millions of Zlotys			Value in Millions of Dollars		
	Imports	Exports	Balance	Imports	Exports	Balance
Monthly average for 1925	138,8	116,4	−22,4	25,6	20,2	−5,4
Monthly average for 1926	99,6	161,4	+61,8	11,3	18,4	+7,1

(a) Did the gold reserves of the Bank of Poland shrink during this period? did the holdings of foreign currencies? Did the reserves of the joint-stock banks decline? (b) What are the evidences of expansion in commercial loans, in case of the Bank of Poland, and of the joint-stock banks? (c) Is deposit banking important in Poland? (d) Did the notes of the Bank of Poland expand during this period? Distinguish between the column headed "Notes in circulation" and the column "Total money in circulation." (e) Was the price level inflated more than the "Total money in circulation"? (f) Was the balance of trade favorable or unfavorable in this period? (g) Was the price level raised faster than the rate of exchange on the United States? on England? on France? (h) Account for the fact that the rate of exchange rose more on the United States than it did on France, Italy, or Belgium.

605. Czechoslovak National Bank

STATEMENT OF CONDITION ON SEPTEMBER 23, 1926

(Statement in Czechoslovak Crowns, 000's omitted)

ASSETS

Gold and silver holdings	1,033.919
Balances abroad and foreign currencies	1,443.713
Other cash	12.267
Bills discounted	120.604

Securities discounted		815
Advances on collaterals		59.536
State notes debt balance	Kč 4,876.631	
Assets of the Banking Office of the Ministry of Finance in liquidation, in charge of the Czechoslovak National Bank	" 657.047	5,533.678
Other assets		660.086
		8,864.618

LIABILITIES

Capital fully paid up ($12,000.000)	406.800
Bank notes in circulation	6,826.172
Check account balances and other sums due at sight	1,317.708
Other maturities: Short term cash vouchers	2.556
Other liabilities	311.382
	8,864.618

Bank rate since January 13, 1926 { Bills ..... 6%; Advances 7–7½%

CZECHOSLOVAK STATE NOTES DEBT

(In Charge of the Czechoslovak National Bank)

CONDITION ON SEPTEMBER 23, 1926

		Original debt Kč	Redemption Kč
State debt resulting from bank notes, check account balances and short term cash vouchers of the Austro-Hungarian Bank taken over	Kč 10.099,538.315·22		
and from the exchange action	" 90,367.284·58	10.189,905.599·80	
Payments on capital levy	Kč 5.539,732.553·33		
plus repayment of advances granted for purpose of paying off Treasury bills (out of interest savings)	" 3,803.497·34		
Total	Kč 5.543,536.050·67		
less overpayments and expenses refunded	Kč 539,699.146·70		
and advances granted up for purpose of paying off Treasury bills	" 139,909.911·53 " 679,609.058·23		4.863,926.992·44
State notes redemption fund			408,182.071·95
State Administration balance due to stamping and exchange action			41,165.406·68
Balance to be redeemed (see Statement of condition of the Czechoslovak National Bank)			4.876,631.128·73
		10.189,905.599·80	10.189,905.599·80

METALLIC COVER

In accordance of the Art. VII, of the National Joint-Stock Bank Act No. 102–1925

			Kč
Bank notes in circulation on September 23, 1926			6.826,171.568·30
plus check account balances and other sums due at sight			1.317,708.461·96
Total			8.143,880.030·26
less State notes debt			4.876,631.128·73
Basis for the calculation of the metallic cover			3.267,248.901·53
Metallic cover:			
Precious metals	gold Kč 916,309.195·50		
	silver " 112,500.340·20	Kč 1.028,809.535·70	
Gold foreign currencies		" 1.358,630.951·67	2.387,440.487·37
Metallic cover is			73·1%

(a) What is the ratio of "Bank notes in circulation" to "Check account balances and other sums due at sight"? Does such a high ratio in such a country as this rest upon historical or economic or social reasons? (b) What is meant by "State notes debt balance"? With what warrant is this item subtracted from the "Bank notes in circulation" in calculating the metallic reserve ratio? (c) If a country is not on the "gold exchange standard" is it proper to regard "Balances abroad and foreign currencies" as a part of the metallic reserve? (d) What is the historical relation of the Czechoslovak National Bank and the Austro-Hungarian Bank?

606. Statement of the Note Issue Department of the State Bank of the Union of Soviet Socialist Republics, June 1, 1926

LIABILITIES	(Chervontzi)	ASSETS	(Chervontzi)
Bank notes transferred to State bank	70,157,997	Gold in coin and bars	14,653,607
Balance to which notes may still be issued	3,874,003	(At rate of R. 5 Kop. 50 = 1 zolotnik) fine gold	
		Platinum	3,039,694
		(At rate of Ch. 2 R. 6 Kop. 65 = 1 zolotnik fine platinum)	
		Foreign currency	5,006,706
		(At rate of £1 sterling = R. 9 Kop. 40)	
		(At rate of $1 dollar = R. 1 Kop. 94)	
		Drafts in foreign currencies	192,888
		(To a total sum of Ch. 214,320 at valuation)	
		Bills in Chervontzi	51,021,238
		(To a total sum of Ch. 56,690,265 at valuation)	
		Securities covering advances	85,867
		(To a total sum of Ch. 95,407 at valuation)	
Total	74,000,000	Total	74,000,000

1 chervonetz = 119.4826 grains of fine gold = £1 1s. 1¾d. = $5.145

(a) Explain the various calculations evaluating the assets. (b) Calculate the percentage the gold reserve bears to the notes trans-

ferred to the State Bank. Does the distribution conform to the law? (c) Explain "Balance to which notes may still be issued." (d) Is there good warrant for regarding *platinum* as a reserve? *foreign currency?* (e) Why should sterling and dollar currencies be selected for reserve purposes? (f) What should be the character of the drafts in *foreign currencies* if they are to support bank note issues? (g) Contrast the security behind the notes of the Bank of England and the notes of the Russian State Bank.

607. Banking in Russia

The Imperial Bank of Russia was chartered in 1860, and was reconstituted in 1894 so as to give greater assistance to the development of industry. Its capital was originally 15,000,000 rubles, with a surplus of 1,000,000 rubles. Additions from the profits raised the capital to 25,000,000 rubles and the surplus to 3,000,000 rubles. In 1894, provision was made for increasing the capital to 50,000,000 rubles and the surplus to 5,000,000 rubles, by setting aside annually a portion of the profits. The head offices of the bank are in St. Petersburg, and it had 107 branches in 1895.

. . . In 1897 there were in circulation 1,068,780,000 rubles in notes. They are legal tender and redeemable on demand in gold.

The bank is purely a state institution under the direct control of the minister of finance. A council, a governor, and two deputy governors compose the central administration, while each branch has a committee to determine the amount of credit to be granted and the value of collateral. Profits go to the imperial treasury.

Perhaps the most striking service rendered to the state has been in connection with the resumption of specie payments through the energy of finance minister Witte. Since the latter part of the eighteenth century, Russia's paper money, issued by the government, had been below par. Steps were taken by Witte to increase the gold reserve. Beginning in 1897 the notes were made redeemable in gold, and assurance that gold redemption would be maintained was given by the provision of the reserve requirement stated above. Silver was put on a subsidiary basis by limiting its legal-tender quality, and by coining it only on government account. Silver was not to be counted as any part of the reserve against circulation. All notes not supported by the gold reserve have been withdrawn and Russia stands squarely on the gold basis.

In addition to the ordinary business of discount and deposit, the bank makes industrial loans based on mortgages on real estate or industrial plants, and on any other collateral which is deemed sufficient by the minister of finance. The specific purpose to which the loan will be devoted must be indicated by the borrower. Except in special cases, implements and machinery serving as security for a loan must be of Russian manufacture. The maximum credit extended to any individual industrial undertaking is 500,000 rubles; to owners of small workshops, 600 rubles.—[Eugene B. Patton, Reform of the Currency, Proceedings of the Academy of Political Science, Columbia University, New York, 1911, pp. 443-45.]

(a) What was the total amount of capital and surplus in 1894 expressed in dollars? How did it compare in size to the Bank of

England? The largest New York banks at the time? (b) Compare the class of business handled with that handled by the Bank of England. (c) How do you account for the fact that this bank was under the control of the minister of finance? (d) Should a central bank hold mortgages, either on industrial plants or real estate? Explain fully.

608. Paper Currency in India

. . . the power of certain banks to issue notes in India was cancelled in 1862, and the responsibility for the paper currency thereafter devolved upon the Government. In 1893, for the purposes of paper currency, India was divided into eight circles, notes for five rupees alone being legal tender throughout the country, and payable at any offices of issue in the country; notes of higher value were legal tender only within the circle for which they were issued.—[Spalding, Eastern Exchanges, p. 26, Isaac Pitman & Sons, New York City, by permission.]

(a) What was the purpose of restricting the legal tender of notes by denominations to certain circles? (b) In 1910 notes of 10 and 50 rupee denomination were "universalized," and in 1911 the 100-rupee note was universalized. Why were these extensions made? (c) The currency notes are completely covered by silver, gold, and securities of the Government of India or of the United Kingdom: the maximum amount issued against securities is fixed by law. There is no legal limit on the total amount of notes issued: is there danger of over-issue? (d) The currency notes are issued at the rate of Rs. 15 for one sovereign: is there a legal obligation to redeem them in gold? why?

609. Operation of the Gold Exchange Standard in India

I. In 1907-9:

. . . as the exchange between India and Great Britain showed signs of falling below 1s.3 29/32d., it became necessary to suspend temporarily the ordinary sales of drafts on India, and to adopt the reverse operation of selling sterling bills in India on London. Sales were made in India to the extent of £8,058,000 at 1s.3 29/32d. per rupee, and this greatly assisted in the settlement of the balance of trade.

(a) Is India's balance of trade usually favorable? Why? Does this facilitate the maintenance of the gold exchange standard? (b) What factors in India and in the United States brought about the above cited condition in Indian exchange in 1907-8? (c) Explain why it was necessary to sell sterling bills in India. Why are they called "Reverse Councils"?

II. In 1914:

The Government arranged on the 3rd August, 1914, to sell sterling bills and telegraphic transfers on London up to a maximum amount of £1,000,000 sterling a week, in order to provide a guarantee of immediate remittance when required. In order to eliminate the uncertainty due to possible delay in the transfer of the bills by mail steamer, it was arranged that demand bills should be payable in London sixteen days after the departure of the weekly mail. The sale of these sterling bills, which, it was pointed out, meant merely a transfer from the reserve in England to that in India, amounted for the months of August, 1914, to January, 1915 inclusive, to £6,807,000 at 1s.3 29/32d. per rupee. The price at which the telegraphic transfers were offered in the first instance was 1s.3 13/16d., but this rate was subsequently raised to 1s.3 27/32d., concurrently with the reduction in the Bank of England rate to 5 per cent.—[Spalding, Eastern Exchanges, p. 23, Isaac Pitman & Sons, New York City, by permission.]

(a) Why did the dislocation of the world's exchanges at the declaration of war make it necessary to support the Indian exchange? (b) Explain the remedial effect of the sale of bills and cable transfers on London. (c) Explain the difference in price between the bills and the cable transfers. (d) Why should the cable transfer rate be changed when the Bank of England rate was reduced? (e) The government further refused to issue gold to private persons in India: what was the purpose? (f) The silver part of the Gold Standard Reserve was abolished in 1914 and was transferred to the Paper Currency Reserve. Why?

610. The Relation of the Government of India to the Currency Movements

The Government of India . . . undertakes not only the supply of currency, but also the remittances of large sums of money on trade account. The actual currency is scattered up and down the country in treasuries, and is under direct control of the finance department of the Government of India, not under local government control. The Government supplies the currency in that form and to that extent necessary to pay for the produce exported; and the Secretary of State's bills, which are cashed in Calcutta, Bombay, and Madras, are met with money from the trade at Presidency towns; while transfers are sold up country. These transfers are met from incoming revenue.—[Spalding, Eastern Exchanges, p. 31, Isaac Pitman & Sons, New York City, by permission.]

(a) What is meant in London by "India's home charges"? (b) These charges are set off against India's favorable balance of trade, "by the Secretary of State's selling for sterling in London rupee bills of exchange payable by the Treasury in India." Explain. (c) "Within India we find the same set-off between Government and trade operations. The Indian Government in settlement of its Council Bills is under the obligation to pay considerable amounts of rupees to traders

at the Presidency towns; while the traders, for their part, have to pay for produce up country, where also the greater part of the Government's revenue is collected." Look up the geography of this movement. (d) Describe the auctions of the Council Bills in London.

611. Effect of the War on the Value of Rupees

At the outbreak of the War silver had been for some time past at about 26d. per ounce. At that time silver in England was coined one ounce standard into 5s.6d., so that the Mint was making a gross profit of about 3s.2d. per ounce. . . . The rupee was made to pass in exchange at 1s.4d., and as the rupee contains 180 grains of silver 11/12ths fine, this was equivalent to a coinage rate of 43.06d. per ounce. If the price of silver went above this rate, which it quickly did, the rupee became worth more dead than alive and it became profitable to melt down rupees. In order to prevent this happening, the Indian Government had to keep calling up the exchange value of the rupee until in early part of December, 1919, it touched 2s.4d. One peculiar aspect of the situation was that the Indian Government, in order to meet the demand for rupees, had to be continually in the market buying silver, and thus it kept forcing the market price against itself. England was not directly concerned with the price of silver until it went above 66d., at which price the shilling melts.—[Minty, English Banking Methods, p. 189, courtesy Isaac Pitman & Sons, 2 W. 45 Street, New York City.]

(a) Calculate the above figures 3s.2d.; 43.06d.; 66d. (b) What does the figure 1s.4d. signify? 2s.4d.? At these figures how many rupees are equivalent to a pound sterling? (c) The increase in English circulation of £1 notes caused an increase in the demand for silver currency: why? (d) To meet the situation the English Parliament reduced the fineness of the silver coins from 0.925 to 0.500: why was this act remedial when the price of silver was as high as 87.5d.? (e) What is the present London price of silver? At the new fineness and weight of coins, what gross profit is now made by the English Mint on its silver coins? (f) In the operation what services did the "Bullion Offices" of the large banks of England perform?

612. Stoppage of Free Coinage of Silver in India

. . . acting on the recommendation of that Committee (Lord Herschell's), on 26th June, 1893, the Government closed the Indian mints to the free coinage of silver, and at the same time ceased itself to add rupees to the circulation. Simultaneously with the closing of the mints, the public was given the legal right to demand from the Government rupees in exchange for gold at the rate of 1s.4d. to the rupee (or 15 rupees to the pound sterling), without limit of amount. From that date, silver ceased to be the standard of value in India, though it is still used, as before, as the chief material of currency.—[Spalding, Eastern Exchanges, p. 20, Isaac Pitman & Sons, New York City, by permission.]

(a) How did American currency legislation help to precipitate

the demonetization of silver in India? (b) At fifteen rupees to the pound sterling what mint ratio of values of gold and silver is represented? (c) In 1899 the rupee was made legal tender in India at 1s.4d. How would this promote the gold exchange standard? Was it a necessary part of the scheme of gold exchange standard? (d) In a strictly gold standard is it necessary that a gold redemption fund be kept in the country? Is this necessary under the gold exchange standard? (e) Distinguish between the "Gold Standard Reserve" and the "Paper Currency Reserve" in India.

613. Banks in Indian Finance

Classes of banks doing business in and with India:

1. The Exchange banks
2. The Presidency banks: The Bank of Bengal, the Bank of Bombay, the Bank of Madras
3. The Indian joint-stock banks
4. British firms half-banker, half-merchant
5. Miscellaneous native bankers and brokers

(a) What is the field activity of each group? (b) Under what restrictions do the Presidency banks operate? (c) The exchange banks are principally branches of the Colonial and foreign banks: do they accept deposits or are they dependent upon their own capital? (d) What are the shroffs? the Hoondee brokers? What is their relation to the Presidency and other banks?

614. The Mercantile Bank of India (Limited)

Head Office: 15 Gracechurch Street, London, E.C. 3

Capital Authorized	$15,000,000	(£3,000,000)
Capital Subscribed	9,000,000	(£1,800,000)
Capital Paid-up	5,250,000	(£1,050,000)
Reserve Fund and Undivided Profits	7,291,105	(£1,458,221)

Bankers:—Bank of England; Midland Bank Limited

Branches and Agencies in India, Ceylon, Straits Settlements, China, Japan, Mauritius and Dutch East Indies

The Bank buys and sells Bills of Exchange, issues Letters of Credit and Circular Notes and transacts Banking and Agency Business in connection with the East on terms to be had on application.

Fixed Deposit rates quoted on application.

On current accounts interest is allowed at 2 per cent per annum on daily balances, provided interest for half year amounts to £1.

New York Agency, 64 Wall Street

(a) What are the apparent characteristics of this bank with respect to branches, head office, banking services performed? (b) Is this a private bank? a joint-stock bank? a colonial bank? a commercial

bank? an investment bank? an investment trust? (c) What could be the purpose of the bank in giving its capital, surplus and undivided profits, but not giving its liabilities to outsiders? (d) What is its purpose in giving the "Capital authorized" and the "Capital subscribed" and the "Capital paid-up"? What are the differences between these, and how important is each to the creditors of the bank? (e) What does the item "Bankers:—Bank of England; Midland Bank, Limited" signify?

615. Rates of Exchange Prevailing in Shanghai

Average Week Ending	1926 October 16	1926 October 9
BANKS' SELLING RATES FOR T. T.		
London	2/5–9/10	2/6–1/2
American	60–3/5	62–1/6
France	2106 Nom.	2173 Nom.
India	166–3/5	171
Hongkong	79–7/10	79–1/12
Japan	79–9/10	78
Batavia	149–4/5	156–5/6
Straits	93–3/5	91–1/8

Average Week Ending	1926 October 16	1926 October 9
BANKS' BUYING RATES FOR T. T.		
London 4 m/s credits	2/7–3/5	2/8–3/8
America 4 m/s credits	63–7/10	65–1/8
America 4 m/s docts	64–1/5	64–3/4
France 4 m/s credits	2236 Nom.	2303 Nom.
London-Bar silver		
spot	25–7/10	26–1/4
Forward	25–3/4	26–1/4
Chinese Dollars	720700	719604
Native Interest	.16	.16

(a) Explain the difference between "buying rate" and "selling rate" for telegraphic transfers. (b) What is the monetary unit of Shanghai? (c) Determine the method of quoting exchange on each country. (d) Distinguish between "America 4 m/s credits" and "America 4 m/s docts." (e) Why were the rates on France at this time "nominal"? (f) Distinguish between the "spot" and "forward" quotation for London-bar silver. (g) Explain the quotation on Chinese dollars.

616. Banks in Japan

Differentiate between the functions of the following banks: (a) The Yokohama Specie Banks (Yokohama Shokin Ginko). (b) The Bank of Japan (Nippon Ginko). (c) The Hypothec Bank of Japan (Nippon Kwangyo Ginko). (d) The Industrial Bank of Japan. (e) The Hokkaido Colonial Bank, and the Bank of Taiwan.

617. Rediscount Rate Situation in Japan

The official rediscount rate of the Bank of Japan on commercial bills and bills secured by national bonds is two sen per 100 yen per day, 7.3% per annum. Market rates on call money during 1925 averages 5.84%, while ordinary commercial bills ranged between 8.76% and 9.125% a year. The differences between these and the official rates are about twice those prevailing between official and market quotations in New York and

London. The official rate is sometimes left unchanged for five years or more, while the market is turning somersaults.

Instead of taking their bills to the Bank of Japan for rediscount when short of ready cash, banks and bill brokers enter the call loan market. Hence the bank's cash in hand is generally lent at call to banks and bill brokers, who use it for loans against security, purchase of securities and for adjustments of accounts in times of financial stringency. Because of this, the market is not elastic, as is the case of New York and London, there is no guarantee of automatic recovery of money and the rate sags in the middle of each month and rises toward the end, generally over a range of about 2% per annum.—[*Wall Street Journal,* July 19, 1926, by permission.]

(a) Contrast the relationship of the Bank of Japan and the Japanese money market with the relationship of the Bank of England and the London money market, and of the Federal Reserve Bank with the New York money market. (b) Suggest ways in which the elasticity of the Japanese market may be increased.

CHAPTER XXI

HISTORY OF BANKING IN THE UNITED STATES

618. Financial Position of the United States, 1784-1812

ESTIMATES OF BANK CAPITAL AND CIRCULATION, AND THE MONEY IN THE COUNTRY FOR VARIOUS DATES TO 1811

(Compiled from Crawford's Reports and Elliot's Funding System)

(Millions omitted, except in first and last columns)

	Banks (including Bank of United States after 1790)				Money Volume		
	Number	Capital	Circulation	Specie	Total	Population	Per Capita
		$	$	$	$		$
1784	3	2.1	2.0	10.0	12.0	3.0	4.00
1790	4	2.5	2.5	9.0	11.5	3.8	3.00
1795	24	21.0	16.0	19.0	35.0	4.5	7.77
1800	29	31.3	15.5	17.5	33.0	5.3	6.22
1805	76	50.5	26.0	17.5	43.5	6.2	7.00
1811	89	52.7	28.1	30.0	58.1	7.3	8.00

It is reported that in 1811 the banks held about $15,000,000 of specie. Statements purporting to give specie holdings prior to that date are misleading.—[Hepburn, History of Currency, rev. ed., 1924, p. 87, The Macmillan Co., New York, by permission.]

(a) Plot the series for: number of banks, capital, circulation, population, per capita money in circulation. Plot on ratio paper and compare rates of growth.

619. Banking Functions of the United States Treasury

The policy of having the Treasury a bank of issue, as it is in the issuing of the Treasury notes, without attaching to it the needed bank-of-issue powers, and of making it a bank of deposit in the maintenance of the subtreasury system without corresponding bank-of-deposit essentials, violates the laws of all successful government financing. If the Treasury is to be a bank of issue, it should be clothed with complete powers in this regard. If it is to be a bank of deposit, it should be governed by principles invoked by such an institution and make of benefit to trade and commerce the moneys which come into its vaults. It ought not to embarrass the business world by locking up vast sums, resulting at times

in artificially creating a money stringency, and at others, by suddenly expending equally large amounts, creating a plethora.

(a) Do you agree "that there is little, if any, room to doubt the folly of the direct issue and redemption of Treasury bank notes by the Government"? Is the emergency of war finance sufficient justification for their issue? (b) Did the abandonment of the subtreasury system correct the abuses named above with respect to the hoarding of government funds? (c) Is the Treasury equipped, by way of readily convertible assets, or by large reserve funds, to function as a bank in maintaining instant convertibility of demand notes or deposits? Does its great borrowing power constitute a good equipment for such purpose?

620. Relation of a National Bank to the Supply of Gold and Silver

A nation that has no mines of its own must derive the precious metals from others; generally speaking, in exchange for the products of its labor and industry. The quantity it will possess will, therefore, in the ordinary course of things, be regulated by the favorable or unfavorable balance of its trade; that is, by the proportion between its abilities to supply foreigners, and its wants of them, between the amount of its exportations and that of its importations. Hence, the state of its agriculture and manufactures, the quantity and quality of its labor and industry, must, in the main, influence and determine the increase or decrease of its gold and silver. If this be true, the inference seems to be that well constituted banks favor the increase of the precious metals. It has been shown that they augment, in different ways, the active capital of a country. This it is which generates employment, which animates and expands labor and industry. Every addition which is made to it, by contributing to put in motion a greater quantity of both, tends to create a greater quantity of the products of both, and, by furnishing more materials for exportation, conduces to a favorable balance of trade, and consequently to the introduction and increase of gold and silver.—[Hamilton, in his report on the Bank, 1790.]

(a) Should Hamilton have treated the balance of international payments rather than the balance of trade? (b) What has been the course of our balance of trade, has it been favorable or unfavorable? Has it brought gold and silver to us or taken them from us? (c) Did the establishment of the Bank of the United States in 1791 and again in 1816 accomplish what Hamilton argued it would?

621. Hamilton on the Need of a National Bank

In reply to an order from Congress, to inform that body what further provisions he deemed necessary to establish the public credit, Alexander Hamilton, in December, 1790, submitted his plan for the establishment of a Bank of the United States, similar in its constitution to the Bank of England. He regarded it necessary, owing to the lack of knowledge

of the functions of banks, to devote a large portion of the report to that subject. He showed very lucidly how the system of discounts and credits and the use of checks operated to supplement the stock of coin and foster trade and commerce. He demonstrated that the organization of such a bank of issue would enable the country to obtain a manifold use of the volume of coin available, would aid the government in obtaining loans in sudden emergencies by having the capital concentrated, would facilitate the payment of taxes by extending credit and also furnish a convenient medium for remittance from place to place, which latter function would be further facilitated by the system of branches proposed. The bank would serve as the receiver and disburser of public funds, and the money derived from taxes would not be locked up awaiting the government's expenditures, but remain all the while in circulation. He thus anticipated the arguments against the present subtreasury system.

He controverted the current charges that banks "serve to increase usury," that they "tend to prevent other kinds of lending," "furnish temptations to overtrading," "afford aid to ignorant adventurers," "give to bankrupt and fraudulent creditors fictitious credit," and "have a tendency to banish gold and silver from the country.—[Hepburn, History of Currency, rev. ed., 1924, p. 75, The Macmillan Co., New York, by permission.]

(a) What was the argument that banks "serve to increase usury"? "tend to prevent other kinds of lending"? "furnish temptations to overtrading"? "afford aid to ignorant adventurers"? "give to bankrupt and fradulent creditors fictitious credit"? "have a tendency to banish gold and silver from the country"? (b) How did Hamilton meet each argument?

622. Financing of the War of 1812

The government did not succeed in disposing of its obligations at par. An official report shows that of the $80,000,000 of bonds and notes placed during the War of 1812, owing to the discounts thereon and the depreciated currency received in payment therefor, the Treasury actually obtained only $34,000,000 (McDuffie's Report on Bank of United States, 21st Congress, 1st Sess.). In other words, had the Treasury been able to dispose of its notes and bonds at par in coin, and had its balances in the various state banks been available, a loan of $34,000,000 properly financed would probably have covered the expenses of the war, for which, ultimately, the people paid $80,000,000 and interest. Gallatin, in reviewing the period, expressed the opinion unequivocally that, had the Bank of the United States been rechartered, suspension of specie payments would have been avoided and so this loss, enormous for that period, would not have been incurred.—[Hepburn, History of Currency, rev. ed., 1924, p. 90, The Macmillan Co., New York, by permission.]

(a) Why were the government bonds sold at discounts? Why were the depreciated notes accepted in payment? (b) How could the rechartered bank of the United States have prevented suspension of specie payments?

623. Report of the Bank of the United States, September 1819

Resources

Funded debt of the United States		$ 7,252,501.34
Bills discounted, viz.:		
On personal security	$21,226,128.56	
On personal security and funded debt	229,024.00	
On personal security and bank stock, etc	7,937,515.83	29,392,668.39
Bills of exchange, viz.:		
Foreign	$ 138,470.66	
Domestic	1,375.087.86	1,513,558.52
Baring Bros. & Co., for bills in favor of J. Richards		94,864.37
Offices of discount and deposit		32,267,712.09
State banks		2,964,860.65
Real estate, permanent expenses, and bonus		780,992.59
Expenses		79,936.61
Cash, viz.:		
Deficient at Baltimore	$ 146,454.74	
Notes of the Bank of the United States and branches	10,582,147.09	
Notes of State banks	1,133,923.86	
Specie	3,254,479.91	15,117,005.60
Total		$ 89,464,100.16

Liabilities

Capital stock		$ 34,973,828.63
Bank, branch, and post notes		14,392,258.49
Dividends unclaimed		33,814.60
Discount, exchange, and interest		465,088.28
Profit and loss		1,104,932.94
Due the Bank of the United States and offices of discount and deposit		32,101,135.24
Due State banks		675,818.30
Due Baring Bros. & Co., and Thos. Wilson & Co		142,040.03
Premium and damages on bills purchased on account of Baring Bros. & Co		43,410.20
Bills of exchange received of S. Smith & Buchanan		37,355.55
Deposits, viz:		
On account of the Treasurer of the United States.	$ 1,097,163.33	
On account of public offices	1,765,800.81	
On account of individuals	2,631,453.76	5,494,417.90
Total		$ 89,464,100.16

(a) What proportion of the resources of the Bank consisted of government securities? Is this proportion greater or less than that prevailing in the federal reserve banks now? (b) Comment on the distribution of the "Bills discounted." Criticize the nature of bills based on "personal security and bank stock." (c) What were the relations between the Bank of the United States and Baring Brothers & Co. at this time? (d) Explain the item "Offices of discount and deposit" among the resources, and of the item "Due the Bank of

the United States and offices of discount and deposit" among the liabilities. (e) What are the differences between "Bank, branch, and post notes"? (f) With what accounting and banking propriety are "Notes of the Bank of the United States and branches," and "Deficient at Baltimore," regarded as cash? Are "permanent expenses, and bonus" regarded as resources? (g) Add "Bank, branch, and post notes," and "Deposits," and divide into "Specie" held. What was the specie reserve ratio? Would it be expedient to hold a reserve against "Deposits, on account of the Treasurer of the United States, and on account of public offices"? (h) Criticize the position of the Bank of the United States in 1819 as shown by this statement.

624. Issue of Branch Drafts by Second Bank of the United States

Another practice of the Bank which led to criticism was the issue of "branch drafts" drawn for five dollars, ten dollars, and twenty dollars, by the branches upon the parent bank in Philadelphia, which practically circulated as notes of the Bank and were treated as such in its reports. This was done at first (1826) to obviate the great labor of signing notes that the law imposed upon the president and cashier of the parent bank, a task which on account of the large volume of circulation they were physically unable to perform, and which Congress, notwithstanding repeated petitions, refused to alter. The practice eventually became so general, and partook so much of the nature of "kiting," that it was regarded as unwise. At one time these drafts constituted one-third of the circulation.—[Hepburn, History of Currency, rev. ed., 1924, p. 98, The Macmillan Co., New York, by permission.]

(a) Why did Congress refuse to allow the president and cashier to engross their signatures on the bank notes rather than sign them longhand? (b) Why was the issue of branch drafts regarded as a form of "kiting"?

625. Webster on the Services of the Second Bank of the United States

It is well known to be my opinion that direct injustice was done to the bank in the withdrawal of the deposits; and injustice has been done to it also, as I think, by the gross and unfounded imputations made upon its general management. The bank now, for many years, has accomplished every object intended by its establishment. It has reformed the currency, sustained it when reformed, and upheld a system of internal exchange, safe, cheap and of unprecedented and unparalleled facility. No country has seen the like; nor shall we see it soon again when the operations of the bank shall cease. The directors, of late years especially, have had a most difficult and undesirable duty to perform; but they have performed it, as I think, with entire uprightness and great ability. Every fair investigation has proved this, and the state of the bank itself, the best of all proofs, abundantly shows it. The time will come, I am sure, when justice

will be done them, universally, as it is done them now by those who have sought for information, and have formed their judgments with candor and good sense.—[Webster's Works.]

(a) Webster claimed the Bank had been assailed mainly because it would not yield to party politics: what evidences were there for this view? (b) What was Webster's political relation to Jackson? How did their constituencies differ?

626. Jackson's Objections to the Second Bank of the United States

The charter of the Bank of the United States expires in 1836, and its stockholders will most probably apply for a renewal of their privileges. In order to avoid the evils resulting from precipitancy in a measure involving such important principles and such deep pecuniary interest, I feel that I cannot, in justice to the parties interested, too soon present it to the deliberate consideration of the legislature and the people. Both the constitutionality and the expediency of the law creating this bank are well questioned by a large portion of our fellow-citizens and it must be admitted by all, that it has failed in the great end of establishing a uniform and sound currency.

Under these circumstances, if such an institution is deemed essential to the fiscal operations of the government, I submit to the wisdom of the legislature whether a national one, founded upon the credit of the government and its revenues, might not be devised which would avoid all constitutional difficulties, and at the same time secure all the advantages to the government and country that were expected to result from the present bank.—[Messages of Presidents, Vol. II.]

(a) What were the objections of President Jackson at this time (1829) to the Bank of the United States? (b) What constitutional question did Jackson plan to obviate by establishing instead of the present Bank "a national one, founded upon the credit of the government and its revenues"?

627. Free Banking in New York

As finally adjusted, the law provided that one or several persons might qualify and enjoy the right of issuing notes to circulate as money. By depositing with the state comptroller stocks of the United States, of the state of New York, or of any other state approved by the comptroller and by valuation made equal to a 5% stock of the state of New York; or by depositing bonds bearing not less than 6% secured by mortgage on productive, unencumbered real estate worth double the amount of the mortgage; the right to receive circulating notes for an equal amount was established. In case of default these securities were to be sold and the notes redeemed with the proceeds. Interest on the securities deposited was paid to the party depositing the same, so long as there was no failure to redeem notes and the security was deemed adequate. Provision was made for the surrender of notes and the return of securities. The state in no wise guaranteed the notes. A reserve of at least 12½% in specie was required, and refusal to redeem notes brought a penalty of

14%.—[Hepburn, History of Currency, rev. ed., 1924, pp. 143-4, The Macmillan Co., New York, by permission.]

(a) Why is the system called "free banking"? (b) Most of the banks founded under this scheme were started for the sole purpose of issuing notes and were not banks of discount and deposit: what economic function did they perform? (c) Why did New York in 1843 limit the securities that might be deposited to state bonds and not allow mortgages this privilege any longer? (d) What provisions of the law prevented the notes from sinking to discounts at distances from the issuing bank? (e) What is the chief criticism of this system of note issue?

628. Constitutionality of Note Issues by State-Owned Banks

The question of the constitutionality of note-issues of banks owned or controlled by states, came before the Supreme Court of the United States from Georgia and Kentucky in 1824 and 1829; the question was finally decided early in 1837. It was argued that as a state could not emit "bills of credit," it could not authorize such emissions through a bank which it owned in whole or part. The decision (Briscoe vs. Bank of the Commonwealth of Kentucky, 11 Peters 257) held that in order to give notes the character of "bills of credit" they must be issued by the state on the faith of the state, and be binding on the state. The notes of the bank named were not such, but ordinary bank notes, and hence constitutional issues. Justice Story dissented. In the case of Craig vs. Missouri, in 1830 (4 Peters 410) it was decided that certificates issued by a state, made receivable for taxes and salaries, were bills of credit and prohibited by the Constitution.—[Hepburn, History of Currency, rev. ed., 1924, p. 138, The Macmillan Co., New York, by permission.]

(a) What are the provisions of Art. 8, secs. 8 and 10, of the Constitution of the United States? (b) Why did this question arise in Kentucky rather than in New York or Massachusetts? (c) In your opinion is the method of issue through state-owned banks an evasion of the constitutional prohibition? (d) Did the State Bank of North Dakota issue bank notes in recent years? Why?

629. Influence of the Suffolk Bank on New England Bank Notes

Practically this bank, with the cooperation of six other Boston banks, organized a clearing-house for notes of outside institutions, by establishing a redemption fund in the Suffolk Bank. The banks which entered the system would have their notes received at par in Boston, the financial centre, and would be called upon for redemption only at specified periods by the Suffolk, which would receive in redemption, also at par, any notes of banks in good standing in lieu of specie. Banks which refused to enter the "system" were called upon to redeem their notes in specie on demand. The result of this system was that banks which had a redundant circulation were compelled to contract to reasonable limits. On the other hand, the Boston redemption gave their notes a more extended circula-

tion, and the people were not subjected to the onerous discounts which country bank-notes otherwise suffered in the money centres. This loss had been from 3 to 5%. The New England Bank of Boston had reduced it to less than 1%, the actual cost of sending notes for redemption, but the Suffolk reduced it even more, so that ultimately the cost was only 10 cents per $1,000, and this was borne by the banks.—[Hepburn, History of Currency, rev. ed., 1924, p. 104, The Macmillan Co., New York, by permission.]

(a) Is this a case of better money driving poorer out of circulation, that is, of an exception to Gresham's Law? (b) About 1900 Boston banks effected par collection of bank checks: was the system employed the same?

630. Arguments as to the Advantages of an Independent Treasury, 1837-40

The Whigs, under the lead of Clay and Webster, insisted that a national bank was the only adequate remedy for the existing evils. The chief need was a uniform currency system with a proper regulation of the issues of the local banks, which only a central bank could enforce. Van Buren's supporters, under the lead of Wright and Benton, declared that the Bank of the United States had been unable to prevent over-issues; that it was no part of the government's duty to regulate exchange; that the people wanted a separate subtreasury system; that the public money would be more secure in subtreasuries than in banks; that by this system the use of specie would be encouraged and the depreciated bank-notes rejected, thus leading to a uniform currency.

Webster declared the subtreasury plan unworthy of a civilized nation; would keep from general use the sums which the government would receive; was practically hoarding money; would result in contracting the volume of currency; was illogical and unsound.

Other Whigs and some conservative Democrats regarded the scheme as an attack on the whole credit system, sure to lead to contraction of the currency, besides increasing the presidential patronage and power.

Calhoun, now again with the administration, admitted that a central bank was the true remedy, but as he believed it unconstitutional, he supported the subtreasury plan in part, although finally voting against it.—[Hepburn, History of Currency, rev. ed., 1924, p. 134, The Macmillan Co., New York, by permission.]

(a) Which of these arguments proved true? (b) What other arguments were advanced by Van Buren in this December message, 1839? [See Messages of Presidents, Vol. III.]

631. The Independent Treasury Act of 1840

The act provided for the collection, safe-keeping, transfer, and disbursement of public moneys by the Treasury through treasurers and receivers-general, of whom a definite number were to be appointed for the purpose; public money was not to be loaned or deposited in bank, under severe penalties, except that when a large surplus was on hand it might be specially deposited in banks designated by the Secretary, but

could not be loaned by the banks; the banks so used were to receive ⅛% commission; officers handling the funds were to be bonded; vaults were to be built, etc. The specie clause, an important feature which nearly killed the bill, was modified so as to have all public dues paid one-fourth in specie for the first year and an additional fourth each succeeding year until the whole was so payable.—[Hepburn, History of Currency, rev. ed., 1924, p. 138, The Macmillan Co., New York, by permission.]

(a) What was the purpose of allowing deposits of government money in banks but forbidding them to loan it? Would banks accept money on such a basis? (b) Why was the specie clause modified, allowing for a time the payment of government dues in other than specie? (c) Was the Independent Treasury more defensible in 1840 than in 1870 or 1900?

632. Place of National Bank Notes in Circulation of the Country

In 1867 national bank notes formed 41.08% of the money of the country, and continued at that rate, approximately, until 1871, when it rose to 43.74%, amounting to about 44.71% in 1872, and nearly 45% in 1873. From the latter date there was a rapid annual decline to 1890, when such represented only a slight amount in excess of one-tenth of the circulating medium of the country. In 1893 the percentage was 12; in 1896, 13.02; declined to 11 on 1898 and 1899, but rose to 14.17 in 1900, to 14.49 in 1901, and to 14.84 in 1902.—[Report of Comptroller of the Currency, 1902, p. 26.]

(a) Account for these percentage changes. (b) When did the big changes occur since 1902? for what reasons? (c) Has the change in percentage tended to minimize the evils of the inelasticity of the national bank notes? (d) Consider the following as reasons why the national bank notes never became as big a part of the currency as was expected: (1) the volume of greenbacks issued; (2) the extensive use of checks; (3) the enormous coinage of gold and silver; (4) the restriction on issue of small denomination notes; (5) the inelasticity of issue and redemption, by reason of the monthly limit of the amount which may be withdrawn from circulation by depositing lawful money therefor ($3,000,000); (6) the insufficient profit on national bank notes. (e) Did the Acts of July 12, 1882, and of March 14, 1900, result in great increases in the amount of national bank notes? Why?

633. Proposal to Protect National Bank Notes by Safety Fund and Prior Lien on General Assets

The amount available for a safety fund (from the accidental loss or reduction of the circulating notes of national banks) is estimated now to be not less than $6,000,000, and the amount derived from the tax of 1% per annum on circulation during the year 1884 was more than $3,000,000.

Even if this tax for safety fund purposes should be fixed at ½%, in the course of three years a safety fund would be in hand amounting to more than $10,000,000.

The results of the liquidation of 104 national banks which have failed, and the affairs of which have been liquidated or are in process of liquidation by receivers under direction of this office, show in a very interesting manner to what extent it may be safe to permit banks under the national system to issue circulation unprotected by a deposit of United States bonds. Of these 104 banks, 70 have been finally closed, and for them the results are absolute. The remaining 34 are still in process of liquidation, but have progressed so far that the final result can be estimated with comparative accuracy.

The dividends paid to the creditors of all these banks from the proceeds of their general assets amount to $28,379,080. They have an aggregate capital of $21,858,900, upon which under the law they could, on deposit of bonds, issue 90%, or $19,673,010 of circulation. If at the time of their failure the law had permitted an issue of circulation to the amount of 90% of capital, *unsecured except by a lien on general assets* of the 104 banks mentioned, the note holders of 58 would have experienced no loss. If the law had authorized an *unsecured* issue equal to 70% of capital, the notes of 71 of these banks would have been redeemed from the proceeds of their general assets. At 40%, the notes of 90 would have been paid in full, and upon an *unsecured issue* of 25% of capital, loss to note holders would have occurred in the cases of five banks only, or about $62,000 in all.

The experience with these 104 banks shows almost conclusively that if their issues to the amount of 65% of their capital had been secured by a deposit of bonds to an equal amount, the remaining 25% might have been issued without other security than a first lien on the general assets, and if a safety fund had been in existence it would in the case cited have been drawn upon to the extent of $62,000 only upon a circulation amounting to $5,464,700. For a beginning, therefore, it might be safe to authorize banks to issue circulation amounting to 90% of their capital, 70% to be secured by an equal amount of United States bonds at par value, the remaining 20% being issued without other security than a first lien on such assets. But if the law should provide for the accumulation of a safety fund in the manner suggested, then as such safety fund increased, the percentage of circulation unsecured by bonds might be increased, as the diminution of the public debt might require and the safety fund warrant.—[Report of the Comptroller of the Currency, 1885, pp. 17-18.]

(a) Under the conditions prevailing in 1885 was the above a good solution of the national bank note problem? (b) Does the evidence submitted validate the argument? (c) Looking at the situation in retrospect and remembering the history of the national debt, would the adoption of the scheme have been wise, at least up to 1914?

634. Causes of the Shrinkage of the National Bank Note Issues

The constant shrinkage of national-bank circulation is attributable largely to the growing scarcity and rising price of United States bonds, but there is also another influence at work of which the importance is

not generally realized, namely, the displacement of national bank notes by other forms of money. At the end of 1878 the paper money of the country amounted to $685,000,000. . . . (There was also a) stock of coin and of coin certificates held in the principal Eastern ports, estimated at $35,000,000 (and) $40,000,000 coin said to be in circulation in Texas and on the Pacific slope, . . . (making the) total circulation . . . about $760,000,000 . . . The Treasury of the United States (held net) $43,000,000, . . . Upon this computation the effective circulation . . . was less than $720,000,000.

The resumption of specie payments went into effect on January 1, 1879, and as soon as the public became satisfied that it was permanent, the heretofore hoarded specie began to enter into general circulation. . . . The amount thus added . . . has been estimated at $140,000,000. . . . Another influence under which the volume of circulating medium has constantly been expanded is that of the silver coinage law of 1878. Under that law the number of standard silver dollars coined up to October 31, 1888, is $309,780,790. . . . The standard silver dollars, as coins, have never entered into circulation in numbers at all proportional to the number coined, nor did the silver certificates issued under the Act of . . . 1878 fare any better, but the silver certificates . . . of . . . 1886 have been largely absorbed by the public, not apparently because any attention is paid to the basis of their issue, but because they constitute the only supply of notes of small denominations. . . . As a result of these influences . . . the total volume of money in the United States has . . . increased . . . to $1,700,000,000.—[Report of the Comptroller of the Currency, 1888, pp. 7-8.]

(a) Under the conditions prevailing at this time was it possible, as suggested, for the hoarded coin and the silver dollars and certificates to drive national bank notes out of circulation? (b) To what degree can the government force into circulation a poor type of money, such as the silver certificates were in 1888, by starving the circulation for small denomination bills of other kinds of money? Does this process comply with the principles of the quantity theory of money? (c) What were the evidences as to supply of money being redundant in 1888? Consider the following evidences: the drift of the price level, the number of dollars in circulation, the export of gold, the fact that a surplus of $35,000,000 in the Treasury caused money stringency on the market, the readiness with which the public absorbed the silver certificates.

635. Use of National Bank Notes

I. Substitution for the Greenbacks:

In 1888 the following arguments were offered for the substitution of national bank notes for the greenbacks:

1. At present there is excessive currency.
2. Greenbacks are the frailest part of our currency.
3. Present state of things favorable for such substitution.

4. It will provide bonds for the banks to deposit against notes.
5. It will release $100,000,000 gold reserve.
6. It will improve the position of the Treasury, so that it will be able to maintain the silver coinage at par.
7. The new bonds will bear low interest rate.
8. The reserve fund will pay off high-interest bonds.

[See Report of the Comptroller of the Currency, 1888, pp. 10-12].

(a) Which of these arguments pertained to the time only, and which were general? (b) Is there any argument on the basis of relative elasticity of issue?

II. Hypothecation of National Bank Notes:

No national bank association shall, either directly or indirectly, pledge or hypothecate any of its notes of circulation, for the purpose of procuring money to be paid on its capital stock, or to be used in its banking operations, or otherwise; nor shall any association use its circulating notes, or any part thereof, in any manner or form, to create or increase its capital stock.—[Rev. Stat. U. S., sec. 5203.]

(a) Notes of circulation are to be issued by the bank in ordinary course of business. This section is intended to prevent the organization of more than one national bank with the same capital. Outline a plan by which this might be accomplished if a bank might use its own notes for pledge.

636. Payment of Non-current Notes by National Banks

No national bank association shall at any time pay out on loans or discounts, or in purchasing drafts or bills of exchange, or in payment of deposits, or in any other mode pay or put in circulation the notes of any bank or banking association which are not, at any such time, receivable at par, on deposit, and in payment of debts by the association so paying out or circulating such notes; nor shall any association knowingly pay or put in circulation any notes issued by any bank or banking association which at the time of such paying out or putting in circulation is not redeeming its circulating notes in lawful money of the United States.—[Rev. Stat. U. S., sec. 5206.]

(a) How did this law tend to defeat the circulation of poor state bank notes? Did it tend to defeat the operation of Gresham's Law? (b) Every national bank is compelled to take and receive at par, for any debt or liability to it, any and all notes or bills issued by any lawfully organized national bank (Rev. Stat. U. S., sec. 5196): did this promote the circulation of national bank notes? Was it just by this law to compel national banks to receive the notes of every other national bank, and by the statute above quoted to deny it the right to issue them again? (c) To what degree are national bank notes legal tender now? (d) If an officer of a national bank receives a fraudulent note,

issued in the form of money and designed to circulate as such, he is required to stamp it "counterfeit," "altered," or "worthless": who bears the loss upon such occasion? What other persons in the United States are required to stamp counterfeit money?

637. Methods of Forcing Presentation of Notes so as to Cancel Liability

The following plans for forcing note holders to present their notes for redemption in order to relieve the issuing bank of liability were once employed by New York and Wisconsin:

1. New York: The issuing bank was relieved from the obligation to redeem the amount outstanding at the expiration of the six years' notice required by law to be given by the issuing bank.

2. Wisconsin: A bank of issue, after 80% of its notes had been retired, might give notice for two years, in some newspaper of the county where it was established, that its circulating notes must be presented for redemption at the office of the State Comptroller within three years from the date of the first notice. After the expiration of that time the Comptroller was authorized to surrender to the order of the bank any securities he might hold for the redemption of the notes.

(a) Which system was fairest to the note holders? Would either method be satisfactory for the national banks? (b) How at present does a national bank which goes out of existence or which ceases using its note issue privilege, provide for its liability for its notes which have not been presented for redemption? (c) Who profits by the fact that some of the notes are never presented, being either lost or destroyed, or held in numismatic collections? Would it be just and desirable to use this profit toward the payment of notes of insolvent banks?

638. Plan of Elasticity of National Bank Notes

The Comptroller believes that the levying of a tax of 1/6th of 1% upon circulation to 90% of the par of the bonds and allowing the banks to issue currency to the par of the bonds by paying a tax at the rate of 2 or 3% per annum on the excess up to the par when outstanding, will result in the desired increase in our general bank note issues, and provide a marked degree of elasticity in our circulation.—[Report of the Comptroller of the Currency, 1899, p. XV.]

(a) What was the rate of tax on circulation at this time? What would be the purpose in reducing it to 1/6%? (b) Why was it logical to permit issue of notes to par rather than 90% of par at this time? (c) What was the purpose in proposing such high taxes on the 10% additional circulation allowed, that is, 2 or 3%? (d) In

your opinion would these proposals have solved the bank note question of the day? Have any of these proposals been adopted?

639. Convertibility of National Bank Notes

At the present time there is no immediate demand for the redemption of national bank notes; but it would be one of the healthiest evidences of returning soundness in our financial affairs, if it should be inaugurated. If legal tenders should command a small premium, it would begin. It would be the first step towards specie payments, to see a bank note accepted and treated as a promise to pay, and not the payment itself. It would mark an era in legal tender notes—the date of their appreciation in value. At the same time it would be a healthy reminder to the banks that their circulation is a liability payable on demand.—[Annual Report of the Comptroller of the Currency, 1867, p. VII.]

(a) What constituted the circulating media of the United States at this time? (b) Is it true that an inconvertible bank note is accepted and treated as "payment itself," whereas a convertible bank note is accepted and treated as a "promise to pay"? (c) What is meant by the clause, "if legal tender should command a small premium"? (d) Why would it have been particularly difficult for the national banks to make and keep their notes convertible under the régime of inconvertible greenbacks?

640. Competition of National Bank Notes and the Greenbacks

Following the Civil War the following proposals were much advocated: (1) To issue United States notes in payment of the compound interest notes, the seven-thirty notes, and the five-twenty bonds, as they mature and become payable. (2) To deprive the national banks of the right to issue notes for circulation in order that the government may issue its own notes in their place. The argument ran that by the payment of interest on the bonds deposited by national banks with the Treasurer of the United States as security for their circulating notes, the government paid to the banks a bonus for issuing the currency, which it might have without the bonus, by issuing its own notes.

(a) What effect would the first proposal have had on the price level? Would the people of the United States, by the adoption of this proposal, have escaped the burden of paying interest on its debt? of paying its debt? (b) Would the greenbacks have been more inelastic than the national bank notes? (c) Analyze the proposition that the government was paying a bonus for issuing the currency, which it might have without the bonus, by issuing its own notes: is it true? (d) Among the arguments in answer to the proposals, the following were offered: (1) the profit of note issue was reduced

by the premium on the bonds; (2) the 25% reserve against the bank notes was held in greenbacks which were a loan to the government without interest; (3) the national banks would reorganize as state banks; (4) the government enjoys taxes from the national banks. Determine the validity of these arguments.

641. National Bank Notes Cheaper for the Government than Treasury Notes

If Treasury notes not a legal tender were to be issued for the amount of the present paper circulation, in all about 700 millions, the Government . . . must hold a large amount . . . not less than 250 millions . . . of coin as a reserve, a considerable portion of which must be purchased; and the interest upon this reserve and the expense of issuing the notes and the cost of redemption . . . would have to be borne by the Government.—[Annual Report of the Comptroller of the Currency, 1883, p. 16.]

(a) Is the United States Government subjected to any expense under the present plan of issue of national bank notes? Was it in 1883? (b) Is there any fallacy in the above argument as to the economy for the government in placing the note issue function upon private institutions? Is there any objection to this shifting of responsibility for providing a national currency?

642. The Safety of National Bank Notes

No State or nation has ever authorized the organization of banks under a general banking law, with the right to issue circulating notes proportionate to capital, except under a restriction requiring the deposit with the government of securities as the basis for the issue of such notes. Banks in this and other countries, which have been authorized to issue circulating notes without security, have been organized under special charters, and in granting such charters the means and character of the applicants and proposed stockholders are subject to investigation by committees and legislators. Propositions for the issue of circulation without the fullest security cannot be too carefully considered. The security of the national bank note under the present system is perfect. In twenty years not a single bank note has failed to be redeemed at its face value. Banks organized under a general law, located so often at great distances from commercial centers, render a security for circulation of uniform and positive value an absolute necessity. It is evident that the authorizing of more than three thousand banks, under a general or free banking law, to issue circulation without security, located in a country having such extensive territory as our own, would result disastrously. . . . There are in this country more than a thousand State banks and trust companies, and nearly thirty-four hundred private bankers. The temptation would be strong, on the part of these corporations and individuals to organize banks of circulation, if circulation could be obtained without depositing bonds for security. The value of the different notes issued would depend upon the management of the bank and character and stand-

ing of the different stockholders. . . . Even if corporations are organized upon the condition that all should contribute a percentage of the circulation to a safety fund for the protection of the aggregate circulation, there is danger that the issues of fraudulent or badly-managed banks would soon consume the safety fund, and it is evident that the circulation would be paid, if at all, at the expense of the despositor, who would be, in some cases, stripped of the dividends which under existing laws are distributed to unfortunate creditors.—[Report of the Comptroller of the Currency, 1882, pp. 17-18.]

(a) Is safety the highest-ranking characteristic of a good bank note system? Was this ideal foremost in the mind of Secretary Chase in founding the national bank system of note issue, and of Mr. Peel in establishing the system of the Bank of England in 1844? (b) Does the Canadian system disprove the position taken in the above citation that the multiplicity and wide geographical distribution of banks make it inadvisable if not dangerous to authorize free bank note issue, even with a safety fund? (c) Is there any logic in the position that freedom of note issue for thousands of broadly scattered banks is too dangerous to allow in a banking system that already allows full freedom to banks to extend their credit by creating deposits? Does this do damage to the principle that notes and deposits are essentially similar? (d) Did the establishment of a monopoly of note issue in the national banks supported by pledged United States bonds prevent the issue of circulating credit by thousands of non-uniform banks broadly scattered? Did this monopoly and plan of issue tend to weaken the security of the deposits both of the national banks and of the state banks?

643. Legal Tender Quality of National Bank Notes

Section 5182, U. S. Revised Statutes:

. . . such notes shall be received at par in all parts of the United States in payment of taxes, excises, public lands, and all other dues to the United States, except duties on imports; and also for all salaries and other debts and demands owing by the United States to individuals, corporations, and associations within the United States, except interest on the public debt, and in redemption of the national currency.—[See Amendment, passed January 13, 1920.]

(a) Why are national bank notes not legal tender for the payment of duties on imports? (b) Why are payments of interest on the national debt exempted? (c) Why are payments in redemption of the national currency exempted? (d) Why should the government make the national bank notes a legal tender for itself in making most payments but deny it legal tender quality in payments between citizens?

644. Calculation of Profit on National Bank Note Circulation, June 30, 1892

CALCULATION OF PROFIT ON NATIONAL BANK NOTE CIRCULATION, JUNE 30, 1892

	On 2% Bonds		On 4% Bonds		On 6% Bonds	
Market value	$100,000		$116,750		$114,000	
Par value	100,000		100,000		100,000	
Interest		$2,000.00		$4,000.00		$ 6,000 00
Circulation	90,000		90,000		90,000	
5% redemption fund	4,500		4,500		4,500	
Loanable circulation	85,500		85,500		85,500	
Interest on loanable circulation at 6%		5,130.00		5,130.00		5,130.00
Gross receipts		$7,130.00		$9,130.00		$11,130.00
Deductions:						
1% tax on circulation	$ 900.00		$ 900.00		$ 900.00	
Annual cost of redemption	137.48		137.48		137.48	
Express charges	3.00		3.00		3.00	
Cost of plates for circulation	7.50		7.50		7.50	
Agents' fees	7.50		7.50		7.50	
Examinations	43.00		43.00		43.00	
Sinking fund to liquidate premiums	0.00		696.36		1,972.94	
Total		1,098.48		1,794.84		3,071.42
Net receipts		$6,031.52		$7,335.16		$ 8,058.58
Interest on cost of bonds at 6%		6,000.00		7,005.00		6,840.00
Profit on circulation		$31.52		$330.16		$ 1,218.58
Amount of bonds held against circulation	$21,837,000		$129,759,000		$11,600,000	
Per cent obtainable on maximum circulation	0.03152%		0.33016%		1.21858%	
Total possible profit	$ 6,194.72		$385,571.09		$127,219.75	

Total of bonds pledged	$163,196,000
Maximum circulation	$146,876,400
Maximum profit	$518,985.55
Average rate of profit	0.353%

(a) What per cent yield was made at this time by national banks on each type of United States bond pledged to secure national bank notes? (b) Did the 5% redemption fund at this time count as part of the reserve of the bank, and if so, is it logical to deduct it from the circulation? (c) The average cost of examining national banks with $100,000 capital at this time was $43: is this cost wholly incident to the circulation? What is the logic of charging it as a circulation cost? (d) In the above cases the market rate of interest is assumed at 6%: if the rate had been lower, what effect would it have had on profits? Consequently, in what sections of the country was the note issue privilege most profitable? (e) What effect would the following

have had on the profit of the note issue: (1) reducing the tax on circulation; (2) rising price of the bonds; (3) rising market rate of interest; (4) allowing circulation to 100%, rather than 90%, of par value; (5) fewer bank examinations; (6) funding of the bonds into 2%'s. (f) How would the calculation have been affected if the bond were selling at a discount from par? (g) What changes in the above calculation would be necessary nowadays? (h) The total calculated profits of the note issue privilege in 1892 were $518,985.55: assuming this profit stayed approximately stable for an indefinite number of years, what would be the capitalized value of this extra income to the banks, calculated at 6% per annum? If the government had taken the privilege from the banks at this time, what amount would constitute a just compensation to the banks? (i) On July 1, 1892, the national bank note situation was as follows:

Authorized capital stock of national banks	$692,123,665
U. S. bonds on deposit to secure circulation	163,190,050
Circulation secured by U. S. bonds	145,683,023
Lawful money on deposit to redeem circulation	27,000,827
Total national bank notes outstanding	172,683,850
Total interest-bearing funded debt of the U. S.	649,569,262

To what degree were the national banks making use of their note issue privilege?

645. Arguments Against Legal Reserve Requirements for National Bank Notes

In the period about 1870 the following arguments were advanced against the legal minimum reserve requirements against national bank notes: (1) That the directors and managers of banks, and not the legislature which enacts the law or the officer who executes it, are the best judges of the proper reserve to keep. (2) That such laws prevent the banks from extending accommodations to legitimate business interests, which consequently suffer. (3) That the circulation was already safe beyond peradventure.

(a) Which of these arguments were equally applicable to the notes and deposits of national banks? (b) Is the first generalization true in all times and banks? (c) Give instances when extension of credit to legitimate business interests is defeated by the reserve requirement? In your opinion is this a frequent occurrence? Does it occur, however, at the most critical times for the business, as well as the most dangerous times for the bank? Are the bank and the borrower partners in fact and should they therefore share the risks at such critical times? (d) Does the third argument confuse convertibility and ultimate redemption? Is a bank reserve against demand liabilities

designed to give safety? (e) Bagehot claimed that the "very essence and principle in the American system is faulty," for "the near approach to the legal limit of reserve would be a sure incentive to panic." Develop this argument. (f) Is the reserve requirement designed to protect depositors (and note holders) or to protect the borrowers? Can argument number two above be answered on this basis?

646. State Taxation of National Banks

Section 5219 of the Revised Statutes of the United States provides that nothing in the national-bank act shall prevent all the shares in any national bank association from being included in the valuation of the personal property of the owner or holder of such shares in assessing taxes imposed by the authority of the State in which the association is located, but that the legislature of each State may determine and direct the manner and place of taxing all the shares of national banking associations located within the State, subject only to two restrictions: first, that the taxation shall not be at a greater rate than is assessed upon other moneyed capital in the hands of the individual citizens of such State: and, second, that the shares of any national banking association owned by non-residents of any State shall be taxed in the city or town where the bank is located, and not elsewhere. The same section provided that nothing herein contained shall be held or construed to exempt the real property of associations from either State, county, or municipal taxes, to the same extent, according to its value, as other property is taxed.

(a) Was this provision of law necessary to authorize the states to impose any tax whatever on national bank shares? Are the taxes which the states are authorized to impose by this section exclusive, so that the national banks are not liable to any other tax imposed under state authority? (b) Beyond the conferment of such authority, what was the purpose of the law? Was the limitation of taxation named in the two restrictions necessary? (c) The personal property of a national bank cannot be directly assessed for taxation by state authority. The taxes which the states are authorized to impose are taxes upon the shares of stock in the hands of the stockholders. Such taxes are not the same as taxes upon the capital of the bank. Give the argument of the court on this point in City & County of San Francisco *v.* Crocker-Woolworth National Bank, 92 Fed. Rep., 273. (d) As the tax can be only on the shares they must be assessed to the shareholders in their names, and not in the name of the bank. And an assessment of the capital stock as the personal property of the bank without mention of the shareholders is void. Nor can the shares be assessed *in solido* against the bank. See the position of the courts on these points in the following cases: Miller *v.* First National Bank of Cincinnati, 46 Ohio St., 424; Farmers' and Traders' Na-

tonal Bank *v.* Hoffman, 93 Iowa, 119; National Bank of Virginia *v.* City of Richmond, 42 Fed. Rep., 877. (e) In interpreting the expression "moneyed capital" the courts limit it to such as comes into competition with the national banks: from this point of view might a higher tax be imposed by a state on bank shares than on railroad shares? See opinions in such cases as Mercantile National Bank *v.* New York, 121 U. S. 138; First National Bank *v.* Chapman, 173 U. S., 205. (f) In estimating the value of the shares of stock all the property and assets of the bank may be taken into consideration. Suppose a bank owns some tax-exempt United States securities, must the tax assessor deduct these in determining the value of the shares? See Van Allen *v.* The Assessors, 3 Wall., 573; Mechanics' National Bank *v.* Baker, 65 N. J. Law, 113. (g) Is it an illegal discrimination for a state to authorize its commercial or savings banks to deduct from their taxable property the securities issued by itself or by the municipalities under its jurisdiction, and to deduct savings bank deposits, or credits of individuals such as accounts, promissory notes, and mortgages?

647. The Effect of Premiums on Bonds on the National Bank Note Circulation

The profit upon circulation upon the 4 and 4½% bonds, where the rate of interest is 6%, is not much in excess of 3/5 of 1%, and where the rates of interest are above 8% the profits are nominal, and are not sufficient to induce the banks to purchase large amounts as security for circulation. Where the profits are so small there is a serious objection to the investment of so large an amount of capital in premium, which, in the case of 4% bonds, amounts to one-fifth of the face value of the bonds. If the whole public debt were reduced to a uniform rate of 3%, the present high premium upon bonds would almost entirely disappear, and the volume of circulation would respond more readily to the demands of business. The temptation to sell the bonds for the purpose of realizing the premium would no longer remain.—[Report of the Comptroller of the Currency, 1882, p. 21.]

(a) How did the debt payments help to produce the high premium on the bonds? (b) The interest rates, both commercial and financial, short and long-term rates, were falling after 1866: what were the causes of this trend, and how would it affect the price of outstanding bonds? (c) On the other hand, the lower market rates of interest tended to make the premium on the bonds less effective in reducing the profits of note issue: show how. (d) When the Comptroller stated that the refunding of the bonds into lower rate bonds would make the note issue respond more to business needs, did he refer to a seasonal, cyclical, or secular response? (e) Would it have been a good policy to have lowered the tax on national bank notes in

proportion to the rise in the premium on the bonds? (f) Which is the better, from the point of view of safety of notes and of response of issue of notes to business needs, to allow issue up to par only or up to 90% of market value of the bonds?

648. Distribution of the Surplus Revenues

The same act (June 23, 1836) provided that the surplus in the Treasury in excess of $5,000,000 for a working balance be deposited with the states, in proportion to their representation in Congress, in four equal instalments, beginning January 1, 1837, provided the states authorized their treasurers to receive the money and pledge its return on demand of the Secretary of the Treasury. Although the act specifically provided that the funds were to be held as "deposits," the general opinion was that they were given to the states. This measure was finally passed after years of discussion on the subject and after a bill to donate the money to the states had been vetoed as unconstitutional. The amount finally transferred was $28,101,644.

The prospect of the transfer of such a large sum from the depository banks to the states served to add to the general tendency to expansion, and the usual results followed.—[Hepburn, History of Currency, rev. ed., 1924, p. 123, The Macmillan Co., New York, by permission.]

(a) Account for the fact that the government revenues exceeded expenditures at this time? What had been the record of the government in paying national debt? (b) What was the reason for the financial program which raised by revenue more than needed and then distributed the surplus among the states? (c) Did the funds come from the same geographical regions to which they were distributed?

649. Growth in National Banking System, 1890-1925

The following table has been prepared to show certain important changes which have taken place in our national banking system during the past 35 years.

(000 omitted)

Year	Banks in Operation	Capital	Surplus	Loans and Discounts	Investments	Demand Deposits	Time Deposits	Total Resources
		$	$	$	$	$	$	$
1890.....	3,597	657,877	214,965	1,932,393	286,232	1,515,642	.....	3,046,939
1895.....	3,711	656,956	246,178	2,041,499	445,575	1,735,401	.....	3,423,534
1900.....	3,981	632,353	262,388	2,706,535	800,030	2,719,351	.....	5,412,090
1905.....	5,898	808,329	420,785	4,016,735	1,241,070	4,051,579	.....	7,563,156
1910.....	7,231	1,004,288	652,462	5,450,644	1,618,228	5,354,865	.....	9,956,477
1915.....	7,621	1,068,049	725,554	7,357,732	2,243,513	6,246,537	1,417,417	13,467,887
1920.....	8,130	1,272,291	1,019,928	12,095,295	4,122,027	9,717,298	3,631,837	21,367,799
1925.....	8,016	1,361,444	1,106,544	12,468,836	5,753,440	10,178,895	5,785,211	23,832,463

(a) Have changes in total capital and surplus kept pace with growth in the resources? What conclusions, if any, can be drawn from this relationship? (b) Draw a chart showing relationship of loans to investments; time to demand deposits, total capital and surplus to total loans and investments. (c) How do you account for the rapid growth in time deposits after 1915? (d) Has there been any marked change in the ratio of loans and discounts to investments? Explain.

650. Currency Changes After the Civil War

Date	United States Issues			National Bank Notes and Gold Notes (000)	Aggregate (000)	Currency Price of $100 Gold	Gold Price Of $100 Currency
	Legal Tender Notes (000)	Old Demand Notes (000)	Fractional Currency (000)				
	$	$	$	$	$	$	$
August 31, 1865	432,757	402	26,344	176,213	635,719	144.25	69.32
January 1, 1866	425,839	392	26,000	298,588	750,820	144.50	69.20
1867	380,276	221	28,732	299,846	709,076	133.00	75.18
1868	356,000	159	31,597	299,747	687,504	133.25	75.04
1869	355,892	128	34,215	299,629	689,866	135.00	74.07
1870	356,000	113	39,762	299,904	695,779	120.00	83.33
1871	356,000	101	39,995	306,307	702,403	110.75	90.29
1872	357,500	92	40,767	328,465	726,826	109.50	91.32
1873	358,557	84	45,722	344,582	748,947	112.00	89.28
1874	378,401	79	48,544	350,848	777,874	110.25	90.70
1875	382,000	72	46,390	354,128	782,591	112.50	88.89
1876	371,827	69	44,147	346,479	762,523	112.75	88.69
1877	366,055	65	26,348	321,595	714,064	107.00	93.46
1878	349,943	63	17,764	321,672	689,443	102.87	97.21
1879	346,681	62	16,108	323,791	686,642	100.00	100.00

(a) What is meant by "old demand notes"? (b) Why did the fractional currency increase in the early '70's? (c) On ratio paper plot the aggregate currency and the gold price of currency. Are the graphs parallel? What does similarity of slope mean? (d) On ratio paper plot the gold price of currency from 1875 to 1879. Is the graph a straight line? What would it mean if it were a straight line? (e) Solve the equation $88.89\ (1+r)^4=100$. At what rate did the value of the greenbacks increase during the years 1875 to 1879? Would the purchase of greenbacks in 1875 have been a good investment? (f) What is the relation of the currency price of gold and the gold price of currency? (g) Study the column giving the amount of legal tenders, and state the legislation which accounted for each change? (h) Is there any contraction evident which helps to explain the rise of the paper money to par? During this time did the price of gold in terms of legal tenders differ from its price in terms of national bank notes?

651. Profits to the Government from the National Bank System about 1880

I. The government enjoyed various profits from the national bank system about 1880, as follows:

1. The use of a permanent fund belonging to the assets of banks which were insolvent.
2. The use of a fund deposited by banks which had gone into voluntary liquidation, or had deposited legal tender notes for the purpose of reducing their circulation.
3. The whole gain arising from lost or unredeemed notes of the national banks.
4. The taxes on deposits and circulation.

(a) Discuss the justice of the receipt by the government of these respective advantages. (b) In your opinion were they sufficient to warrant the government in assuming the total expense of redemption of national bank notes? (c) Does the government still enjoy all these profits?

II. In 1916 the National Bank of Omaha had a capital and surplus of $5,000,000. It had outstanding $1,000,000 national bank notes. The notes were secured by $1,000,000 United States Panama Canal bonds which were purchased at par. The bank was required to pay the usual tax on these notes. All other expenses incurred by the bank in keeping these notes in circulation amounted to $62.50 per annum for each $100,000 in notes outstanding.

(a) Assuming that money is worth 6% per annum, compute the annual profit which this bank realized through the issuing of these $1,000,000 worth of notes. (b) What items of expense were included in the $62.50?

652. Profit from National Bank Note Privilege 1873

During a large portion of the past year, 5% bonds issued by the government have been at a premium in the market of 15%. A national bank organized in Chicago deposits with the Treasurer $100,000 of 5% bonds, costing $115,000 in currency. Upon these bonds the bank receives from the government $5,000 interest in gold, which, with the premium thereon, would amount to $5,750. It also receives in circulation $90,000, and is required to keep 25% of that amount on hand as reserve, leaving $67,500, from which it would derive an income, at 10%, of $6,750; and from this must be deducted a tax of 1% ($900) upon the amount of circulation issued, leaving an income of $5,850, which, if added to the interest received from the bonds, would amount to $11,600. If the $115,000 had been invested in bonds and mortgages bearing 10% interest, it would net annually $11,500, leaving a profit of $100 to the bank from circulation during the year, and a loss of $15,000 premium upon the bonds at the date of their maturity. The profits of a country bank located

in the West or South, with interest at 10%, adopting the same calculation, would be a little more than 1%, and of a bank located in the city of New York, with interest at 7%, about 1 1/3%; and of a country bank located in the East, with interest at 7%, less than 2½%. The earnings upon capital invested in United States bonds upon which circulation is issued, would not, in the city of New York, exceed the profits of an investment returning an income of 8 1/3%, and in a country bank in the East they would be but little more than on an investment earning 9%.—[Report of the Comptroller of the Currency, 1873, p. XXXIII.]

(a) Show the logic in each step of the above calculation. (b) Are there any factors in the above calculation that are not used in calculating the profit from the note issue privilege today? (c) How did the decline in the premium on gold from 1873 to 1879 affect the profit from the note issue privilege? (d) Did the differences in the rate of profit from the note issue privilege help to explain why national banks were not as frequently established in the West and South as in the East? (e) Why were the United States bonds selling at such high premiums when bonds and mortgages could, apparently from the hypotheses of the calculation, be bought bearing 10% interest? (f) Did interest rates drop after 1873? What effect did the course of interest rates have on the profits from the note issue privilege? (a) How did the abolition of the legal requirement of a 25% reserve against national bank notes affect the profits from the note issue privilege? (h) How does the present-day tax rate on national bank note circulation compare with the rate in 1873? How has this change affected the profits from the note issue privilege? (i) How does the nominal rate borne by securities bearing the note issue privilege in 1873 compare with the rates on bonds having nowadays that privilege? How has this change affected the profits from the issuance of notes? (j) How has the equalization of interest rates over the United States affected the demand for government bonds for the purpose of issuing national bank notes?

653. Sectional Inequality in Taxation of National Banks, 1879

Geographical Divisions	Capital	Amount of Taxes			Ratios to Capital		
		United States	State	Total	United States	State	Total
New England States	$165.0	$1.9	$2.5	$4.5	1.2%	1.5%	2.7%
Middle States	170.4	3.2	2.9	6.1	1.9	1.7	3.6
Southern States	30.6	0.4	0.4	0.8	1.4	1.3	2.7
Western States & Terr's	90.9	1.5	1.8	3.2	1.6	2.0	3.6
	456.9	7.0	7.6	14.6	1.5	1.7	3.2

In the above table the inequality as to national taxation is in appearance only, for the tax on circulation, deposits, and capital is uniform as to all banks and in all parts of the country. The ratios are of taxes to capital only. But in case of state taxation the inequality is a real one and represents very nearly the differences in burden, as the only tax which can be laid by the states on national banks under the law must be laid directly on the shares of stock.

(a) The above comment was given by the Comptroller of the Currency in 1880: do you agree with it?

654. Selection of Government Depositories

The act of June 23, 1836, regulating deposits, directed the Secretary of the Treasury to select, in each state, banks which in his judgment were in a satisfactory condition, in which to deposit the revenues subject to the Treasury drafts. The limit of deposits was 75% of paid-up capital, the banks were required to report their condition periodically to the Secretary, to credit all deposits as specie and pay specie on demand for Treasury drafts, to make transfers and perform such other functions as the Bank of the United States was required to by its charter. The Secretary might also require further security from the banks if in his judgment it was requisite. He was required to report his selections or changes in depositories to Congress, to discontinue depositories that suspended specie payments, or issued notes under five dollars, and to receive for public dues no notes of banks issuing denominations under five dollars. He was given power to require depository banks to have a reasonable amount of specie on hand. For deposits in excess of one-fourth of the capital banks were to pay interest at 2% per annum, and the banks were subject to examination. Transfers of deposits, excepting on account of public business, were especially prohibited.—[Hepburn, History of Currency, rev. ed., 1924, p. 122, The Macmillan Co. New York, by permission.]

(a) Were the above provisions ample to protect the government funds? to provide the necessary fiscal services formerly provided by the Bank of the United States? (b) What was Jackson's attitude toward this law? (c) The depository banks were brought under the supervision of the Treasury: was this a salutary and compensating advantage for the former supervision exercised by the Bank of the United States?

655. Elasticity of National Bank Notes Not Necessary

The most serious objection which is urged against our present system of bank-note currency is its inelasticity and inability to respond to the pressing demands and necessity for an increase of circulation in times of enforced liquidation due to a commercial and banking panic.

Under normal business conditions and in normal times, the inelasticity of the present note issues of banks causes but small inconvenience, though at certain seasons of the year, when crops are to be moved, banks in certain sections of the country are compelled to rediscount their paper

somewhat to supply the needed currency. The demand, however, is usually readily supplied by the banks of the East, and the growing wealth of the West and South is rapidly bringing about a more even distribution of capital and consequently of currency.

We have at present in this country an enormous volume of what may be called bank-credit currency, based upon the assets of our banks, and consisting of checks, drafts, and bills of exchange. This volume of bank-credit currency expands and contracts in accordance with the demands of trade and business under normal conditions, and is the medium through which the great bulk of the business of our country is transacted.

It is extremely elastic, and varies in amount at different seasons of the year. It is generally amply adequate to the business needs of the country, except in times of disturbed confidence and financial panic.

In France and Germany and other countries, where the check and draft system is not developed as it is here, there exists the greater need for large and elastic bank-note issues. In England, where the check and draft system is so well developed, we find more strict provisions regarding uncovered note issues.—[Report of the Comptroller of the Currency, 1898, p. XXIV.]

(a) Why, under our banking system, were deposits elastic but bank notes inelastic? (b) Was the elasticity of the deposits, in the light of the fact that upwards of 90% of our business was done by check, reason enough for lack of concernment about the inelasticity of the bank notes? (c) What facts in our banking system tended to cripple the elasticity of deposits, with respect to both seasonal and cyclical change? (d) Was the rigidity of the bank note system of England and the United States the basic reason why deposit banking tended to eclipse note issue banking in these two countries?

656. The Redemption Fund for the National Bank Notes

I. The redemption fund for national bank notes was established under the Act of June 20, 1874; the chief circumstances under which it was founded were the abolition of the redemption cities and the mutilated and worn condition of the 7,000 different kinds of notes, issued by 2,200 different banks, and amounting to about $352 millions, and the fact that the process of assorting and redemption was too burdensome and expensive to be voluntarily undertaken by the banks at the commercial centers. The Comptroller of the Currency stated that the "chief object of the law was the purification of the circulation, rather than its redemption, in the proper sense of that word."

(a) What is the "proper sense" of the word "redemption"? Is it "redemption" to give greenbacks for bank notes? Is the redemption fund a "reserve" fund? Is the exchange of new bank notes for mutilated ones a process of "redemption"? (b) The Act of June 20, 1874, repealed the law requiring national banks to carry a reserve against national bank notes, 25% for New York banks and 15% for

all other banks. Three-fifths of the 15% reserve of banks outside of New York could up to that time be carried in national banks in redemption cities. Did the shift of redemption from the "redemption cities" to the United States Treasury at Washington, and the reduction of the requirement to 5%, change the *nature* of the fund? What fundamental financial or economic changes gave occasion to this change of law? (c) Is there any warrant for considering the 5% redemption fund a reserve against the deposits of the issuing bank?

II. Expense of Redemption:

. . . under any true system of redemption, the correct principle is that the holder shall, at his own expense, present the note at the place of redemption, while under the Act of June 20, 1875, the expense of such redemption is borne by the bank which issued the note.—[Annual Report of the Comptroller of the Currency, 1875, p. XXXV.]

(a) What were the provisions of the act cited above? (b) If the transmitting bank is made to bear the expense of presentation, the currency is likely to be filthy and mutilated: why? And the banks of the commercial cities would be subject to charges which should be borne by those who have the benefit of the circulation: why? (c) Under the national bank scheme the banks are permitted to send notes to the Treasury for redemption, and since 1875 have not been required to carry reserves against the bank notes: do these privileges compensate for the expense of redemption imposed upon the issuer?

657. Effect of Granting Prior Lien on Assets to Note Holders

. . . take the case of a bank of $100,000 capital, which has failed, and upon final liquidation has paid to its depositors 50% upon claims of $200,000, to wit, the sum of $100,000. Under the plan proposed assume this bank had issued notes, secured by a first lien upon its assets, an amount equal to 60% of its capital, to wit, the sum of $60,000.

Since in investing $300,000, to wit, $100,000 capital and $200,000 deposits, it has lost the sum of $200,000 and has remaining but $100,000, to wit, one-third of its original assets, we assume that of the $57,000 circulation which the bank had to invest in commercial assets (to wit, the $60,000 circulation less $3,000 representing the 5% redemption fund held by the Government) it would have lost the same proportion, and have left of that investment but one-third in good assets, to wit, $19,000. We add, therefore, to the $100,000 actually paid depositors, the sum of $19,000, giving $119,000, for distribution between depositors and note holders. But, as under these plans, the note holders are preferred for the full amount of their $60,000 notes, of which but $3,000 is in the redemption fund, there must be subtracted from this $119,000 the sum of $57,000, leaving the depositors only $62,000, as against $100,000 which they received under the present system, without any burden of note preferences upon common assets. As $62,000 is but 31% of their total claims of $200,000, upon which under the present system they received $100,000 dividends, or 50%, it follows that their loss, directly traceable to the

preference would amount to 19% of the face of their deposits.—[Report of Comptroller of the Currency, 1898, p. XVI.]

(a) Criticize this calculation and its hypotheses. (b) Essentially why would a simple scheme of prior lien on general assets as protection for bank notes be more unfair to depositors than the present scheme of national bank note issue secured by pledged government bonds and by prior lien on general assets? (c) Take the figures from a national bank failure as reported by the Comptroller of the Currency and calculate the extra burden upon depositors caused by the preference given to note holders.

658. Signatures on National Bank Notes

Act of July 28, 1892: "All national-bank notes that have been or may be issued to, or received by, any national bank, notwithstanding such notes may have been lost by or stolen from the bank and put in circulation without the signature or upon the forged signature of the president or vice president and cashier" shall be redeemed by the bank in the same manner as notes bearing the signature of the bank's officers.

(a) What is the course by which national bank notes are issued to a bank? When, where, and by whom are they ordinarily signed? (b) Under the Act of 1892 is signature necessary to bind the bank? (c) Are federal reserve notes signed by the issuing bank? (d) Why was the Act of 1892 thought necessary? (e) Notes bearing engraved signatures may be laundered at the Bureau of Engraving and Printing: can notes signed by bank officers be so laundered? (f) Why did the Comptroller of the Currency in 1914 recommend that the government furnish national banks, through the Bureau of Engraving and Printing, with complete notes with the engraved signatures of their respective officers?

659. Plan of Bank Note Reform Advocated by Comptroller Ridgeley, 1906

It is recommended that the laws be amended so as to allow of the following changes:

All national banks which have been in operation for not less than two years and which have an unimpaired surplus of not less than 20% of their capital stock, to be permitted to issue not to exceed 50% of the amount of their bond-covered notes in notes uncovered by bond deposits.

To protect these notes the banks shall carry the same reserves as against deposits, on gold or its equivalent; in reserve banks this would be 25%, and in all others 15% of the outstanding notes.

These notes to be further protected by a guaranty fund of 5%, to be deposited by the issuing bank with the Treasurer of the United States before any are issued.

Out of this guaranty fund all such gold reserve notes to be redeemed on demand.

The guaranty fund to be kept good by a graduated tax on the gold reserve notes, beginning at a rate of not over 2½% per annum.

Every bank issuing gold reserve notes to be required to provide means of redemption for such notes, in every reserve and central reserve city, and also such other points as may be designated.

These points to be so numerous and convenient as to put every national bank within twenty-four hours of a redemption center.

The provision limiting the retirement of the present bond-secured notes to $3,000,000 per month, not to apply to gold reserve notes, and this limit to be repealed or greatly extended, at the discretion of the Secretary of the Treasury, in its application to bond secured notes.—[Report of the Comptroller of the Currency, 1906, p. 66.]

(a) The above plan was designed to effect elasticity of national bank notes: show how it might be expected to have this effect? (b) "There is no other country where there is such a great variation in the amount of currency needed for current cash transactions, owing to the vast extent of our territory, our varied interests and enormous business, and the great value of crops and products which have to be moved at certain seasons, calling for very large and varying amounts of cash." Are these all, or even the most important factors, in considering the needs for an elastic currency? "There is no good way to provide this needed elasticity but by means of bank notes." Do you agree? (c) Where probably did the Comptroller get the suggestions for each of the above provisions? Are any of them now employed in the Federal Reserve System? (d) Does the Comptroller properly identify bank notes and bank deposits? (e) Is it dangerous to have a great number of small, widely scattered banks issuing uncovered bank notes? In this respect how would the above system differ from the English? Is there any special advantage of having the uncovered notes issued by many small and scattered banks rather than by a big central bank? (f) If uncovered notes are to be taxed, should the tax be progressive? (g) Does the above scheme offer any temptation for inflation that did not exist under the national bank system at the time? The reserves required of banks in reserve and central reserve cities against deposits were higher than against country banks: did the same logic for this requirement apply to the bank notes under the above scheme? (h) Is it logical that bank notes should be cleared along with checks? Would this be likely to happen under the above scheme?

660. Currency Reform vs. National Bank Reform

During the period 1890 to 1913, much attention was given by bankers, economists and politicians to the problem of securing a more

satisfactory form of currency. In fact, more emphasis was placed upon currency reform than upon banking reform. When the Federal Reserve Act was passed in 1913, provision was made for the retirement of national bank notes and the replacement of them by federal reserve bank notes.

(a) What was the specific provision regarding the withdrawal of national bank notes? (b) Prepare a table showing the total volume of money in circulation and the volume of national bank notes outstanding since 1914. Use annual figures published in the Reports of Comptroller of the Currency. (c) Draw a chart showing the changes in the volume of these two items. Indicate on the chart also the total number of national banks in operation. (d) What has been the aggregate change in national bank notes? the relative changes in total volume of currency? (e) How do you account for these changes?

661. Expansion of National Banks Caused by the Act of March 14, 1900

	Number of National Banks Organized from March 14, 1900, to October 31, 1909				National Banks Reporting Sept. 1, 1909
	Capital $25,000	Capital over $25,000, less than $50,000	Capital $50,000 and over	Total Organized	
In New England States	17	1	30	48	484
In Eastern States	361	46	344	751	1,567
In Southern States	468	147	442	1,057	1,406
In Middle Western States	681	102	394	1,177	1,997
In Western States	699	68	180	947	1,121
In Pacific States	164	12	147	323	397
In Total United States	2,392	376	1,540	4,308	6,977

Changes in National Banks, 1900 to 1909

	Conversions		Reorganizations		Primary Organizations		Total	
	Number	Capital (000,000)	Number	Capital (000,000)	Number	Capital (000,000)	Number	Capital (000,000)
Capital less than $50,000	349	$ 9	842	$22	1,577	$40	2,768	$ 72
Capital $50,000 and over	235	32	498	66	807	90	1,540	188
Total	584	$41	1,340	$88	2,384	$130	4,308	$261

	March 14, 1900	October 31, 1909
Number of Banks	3,617	7,025
Authorized capital	616 millions	964 millions
Bonds on deposit	244 "	679 "
Circulation on bonds	216 "	678 "
Circulation on lawful money	38 "	25 "
Total circulation	254 "	703 "

(a) What provisions of the Act of March 14, 1900, occasioned an expansion of the national bank system? (b) Was the expansion one of large or small banks? (c) How was the expansion distributed geographically? (d) What proportion of the new national banks were by conversions of state institutions? (e) What did the panic of 1900, and of 1907, have to do with the number of reorganizations? (f) How great was the expansion of the national bank notes? Was the general price level rising during this period?

662. The National Gold Banks

Some leading facts about the "National Gold Banks":

1. Authorized by Act of July 12, 1870.
2. Largest amount of circulation outstanding was on August 19, 1875, $2,640,000 on a capitalization of $4,630,000.
3. Maximum number of banks in operation was 9, on November 1, 1877, all in California.
4. Same restrictions on these banks as on the national banks. Notes to be issued up to 80% of the value of the bonds deposited. A reserve of 25% in gold and silver required. Notes redeemable in gold alone.

(a) What was the purpose of Congress in authorizing these "national gold banks" alongside the regular "national banks"? Why were they all in California? (b) In 1874, June 20, the requirement of a 25% gold reserve was repealed with respect to the national banks but not with respect to the national gold banks: why this discrimination? (c) Paper money was not acceptable to the Californians after the panic of 1873: did this opposition to paper money include the gold notes of the national gold banks? (d) How did the 20% safety margin and the 25% reserve requirements affect the profits of the gold note issue? (e) Did the national gold banks serve any specific benefit?

663. Seasonal Internal Shipments of Currency

For many years past, large amounts of currency have been annually drawn from the banks of the city of New York by the banks in the interior, for the purchase and shipment of grain and other products. The banks of the West and South supply the grain buyers with money, who pay it to the farmers, and by them it is disbursed to the country merchants. It then goes to the wholesale merchants in the larger cities of the interior, by whom it is deposited in the banks and returned again to the money centers in the Eastern States. Thus the money which was paid out in the fall returns again to the city of New York long before mid-winter, whereby much of the currency of the country, instead of continuing to circulate, accumulates in the New York banks both before and after the

time for the large movements of produce.—[Report of the Comptroller of the Currency, 1880, p. VI.]

(a) Point out the bad economy of a banking system under which such transportation of currency is necessary. (b) In 1879 and 1880 the movement was exceptional in that the currency which moved to the interior in the fall never returned to the New York banks: why should these years be exceptional? (c) What effect did the seasonal movement of funds have upon the money market of New York? upon stock exchange operations? (d) Was this internal shipment of funds seasonally the result of the inelasticity of the national bank note system? If the bank note system had been elastic but confined to national banks would the shipment have been avoided? (e) What provisions of the Federal Reserve System were aimed at remedying the evils of this annual interior shipment of funds?

664. Amendment of the Aldrich-Vreeland Act

The Federal Reserve Act of December 23, 1913, amended and rendered practicable and efficient this law of May 30, 1908, by reducing the rate of interest charged to the banks for the first three months to 3% per annum, the rate increasing thereafter ½% per annum per month to a maximum of 6%. . . .

To facilitate the issuance of this additional currency to the national banks, the Congress, with remarkable expedition, showing its intelligent understanding of the gravity of the situation, passed, August 4, 1914, an amendment to the act of May 30, 1908, authorizing the Secretary of the Treasury, in his discretion, to waive that provision of the act restricting the issuance of additional currency to national banks which had outstanding circulation equal to 40% of their capital. The Congress further amended the act of May 30, 1908, so as to increase the amount of currency which it would be possible for a bank to issue from 100% of capital and surplus to 125% of capital and surplus, and at the same time annulled that provision of the act by which the total issuance of such currency was limited to $500,000,000.—[Report of the Comptroller of the Currency, 1914, pp. 12-14.]

(a) Did these amendments lead to the formation of additional national currency associations? (b) What amount of currency was taken out to meet the emergency? (c) Were the national currency associations well scattered over the whole country? (d) What proportion of the national banks became members of national currency associations? What proportion of the national banking capital was represented? (e) Did the Comptroller of the Currency issue additional currency direct to national banks, in addition to that issued through the national currency associations? (f) Did these actions render it unnecessary for the New York Clearing House to issue clearing-house loan certificates?

665. National Currency Associations under Aldrich-Vreeland Act

The earliest National Currency Associations organized under the Aldrich-Vreeland Act were as follows:

National Currency Association of:	Date of Organization	Membership		Eligible Banks		Location of Banks
		No. of Banks	Capital and Surplus (000,000)	No.	Capital and Surplus (000,000)	
	1910					
Philadelphia	July 29	28	$ 54	33	$58	Philadelphia
New York	July 29	35	237	39	245	New York City
State of Louisiana	Aug. 4	10	10	31	13	5 in New Orleans
Boston	Aug. 16	15	34	20	41	Boston
Georgia	Aug. 18	21	11	113	20	Georgia
St. Louis	Sept. 13	11	32	..	....	7 in St. Louis
Chicago	Oct. 14	11	64	11	64	Chicago
The Twin Cities	Oct. 31	14	20	..	....	Minneapolis, St. Paul and nearby towns
Detroit	Sept. 27	16	9	..	....	4 in Detroit

(a) What were the provisions of the Aldrich-Vreeland Act for national currency associations? How did these associations differ from national banking associations [national banks]? See the copy of the by-laws of the National Currency Association of New York. [Report of the Comptroller of the Currency, 1910, pp. 34-5.] (b) See the regulations governing the formation of these associations as formulated by the Secretary of the Treasury. [Report of the Comptroller of the Currency, 1910, pp. 32-3.] If a bank became a member of such association, what were the prerequisites for withdrawal? (c) Was a 5% redemption fund required against the notes of such associations? (d) What geographical limitations on membership were laid down by law? Give the reason. How were they followed by the above illustrative associations? (e) Did an association include all the eligible banks of its area? (f) Did these associations ever function as note-issuing bodies? [See Report of the Comptroller of the Currency, 1911, p. 76; 1913, p. 33; 1914, pp. 12-14, and pp. 55-61.] What proportion of the banks joined the associations?

666. Changes in National Banks from 1890 to 1925

The following table gives some of the most important statistics regarding the changes taking place within the national banking system from 1890 to 1925:

(000 omitted)

Year	Capital, Surplus and Undiv. Prof.	Total Deposits	Bills Payable and Rediscounts	Total Loan Discounts and Investments	Total Resources
	$	$	$	$	$
1890	984,616	1,515,642	37,099	2,218,625	3,046,939
1895	997,636	1,735,401	21,852	2,486,074	3,423,534
1900	1,036,247	2,719,351	15,813	3,506,565	5,412,090
1905	1,441,486	4,051,579	35,867	5,257,805	7,563,156
1910	1,899,558	5,354,865	71,686	7,068,872	9,956,477
1915	2,087,870	7,663,954	98,416	9,601,245	13,467,887
1920	2,787,941	13,349,135	911,022*	16,217,222	21,367,799
1925	2,958,445	15,964,106	445,795	18,222,276	23,832,463

* Amounts for the years 1913, 1914, 1916, 1917, 1918, 1919 and 1921 were 100,460; 132,422; 35,131; 266,432; 878,823; 938,311; and 496,323, respectively.

(a) Prepare a chart showing the total loans and investments, total capital and surplus and undivided profits, total deposits, and total resources. (b) Study both the table and chart carefully. Have any marked changes occurred: (1) as regards security of depositors? (2) in the ratio of capitalization to earning assets? (3) in the ratio between capitalization and total resources? (c) Make general suggestions or criticisms of the situation as shown by these facts? (d) Account for the wide fluctuations in the amount of bills payable and rediscounts. Give special attention to 1913 and 1914, also 1918 and 1921.

CHAPTER XXII

THE FEDERAL RESERVE SYSTEM

667. Operating Functions of Federal Reserve Banks

In considering the relations between member banks and the reserve banks, emphasis is generally placed on the amount of accommodation extended by these banks to individual member banks or to all member banks combined. . . . During 1925 the number of member banks accommodated through the discount of paper was 5,183, indicating that in the course of the year more than one-half of the member banks received direct accommodations from the reserve banks. Changes from month to month and from year to year in the number of banks accommodated by the reserve banks are not closely related to changes in the amount of reserve bank credit required by the member banks. Thus in November, 1925, the total volume of paper discounted by the reserve banks was $2,538,000,000, compared with $3,331,000,000 in October, while the number of banks accommodated increased from 2,796 to 2,876; and for the year 1925 the number of member banks discounting one or more times at the reserve banks was 5,183, compared with 6,941 in 1920, when the demand for reserve bank Credit was at the peak, and the volume of discounts for the entire year was $85,321,000,000, while in 1925 it was $32,563,000,000.

In addition to discounting and open-market operations, the Federal reserve banks continuously render a large number of other services to member and nonmember banks. These other services include the handling of member bank reserves, the supplying of currency, the collection and clearance of checks, the collection of noncash items (drafts, notes and coupons), the transfer of funds by wire, and the safekeeping of securities for member banks. In addition to these services rendered directly to banks are those rendered by the reserve banks functioning as fiscal agents and depositaries of the Federal Government.—[Annual Report Federal Reserve Board, 1925, pp. 22-3.]

(a) Under what conditions may member banks secure funds from federal reserve banks? Is the same privilege open to nonmember banks? (b) May nonmember banks clear and collect checks through the reserve banks? (c) Will the reserve banks supply both member and nonmember banks currency? Can new bills be had from them at any time? (d) Explain the method of transferring funds by wire.

668. Charts of the Federal Reserve Banks of New York and San Francisco

(a) Compare the charts of these two reserve banks with those in Problem 124. What fundamental differences, if any, do you find?

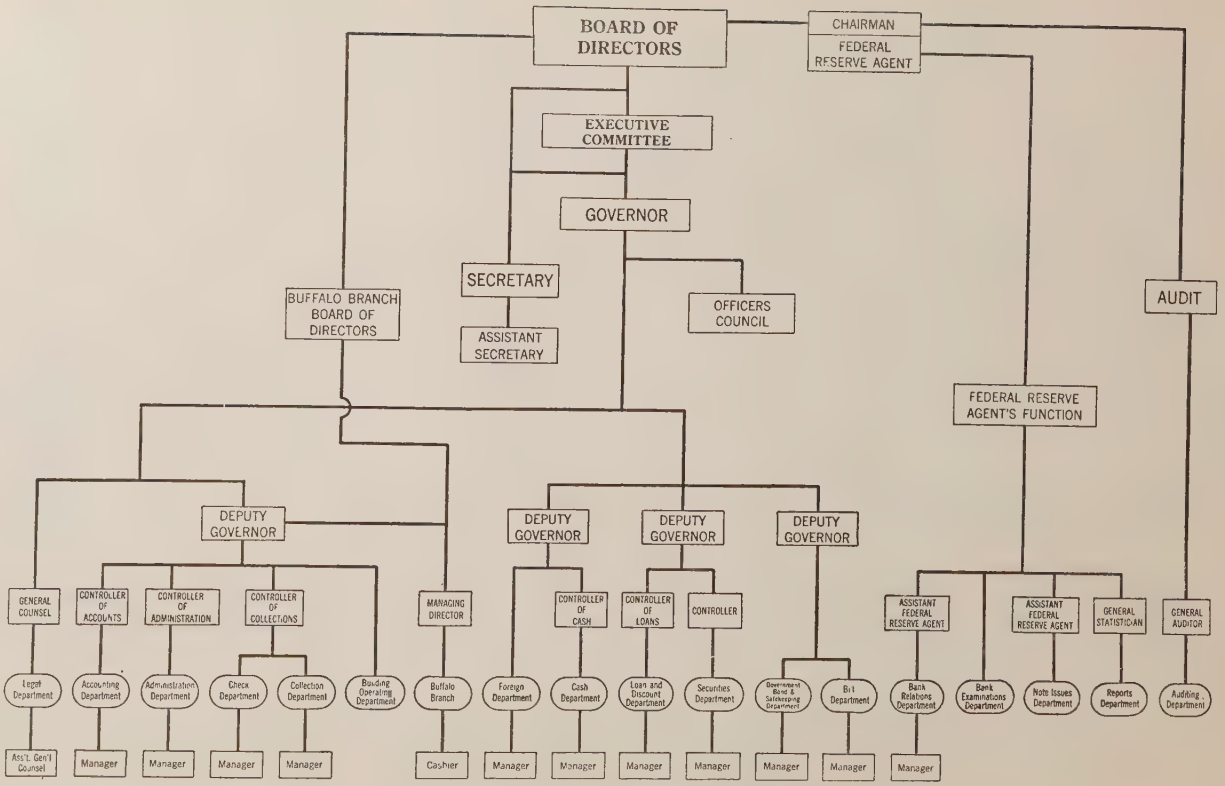


Chart 1. Organization Chart of Federal Reserve Bank of New York

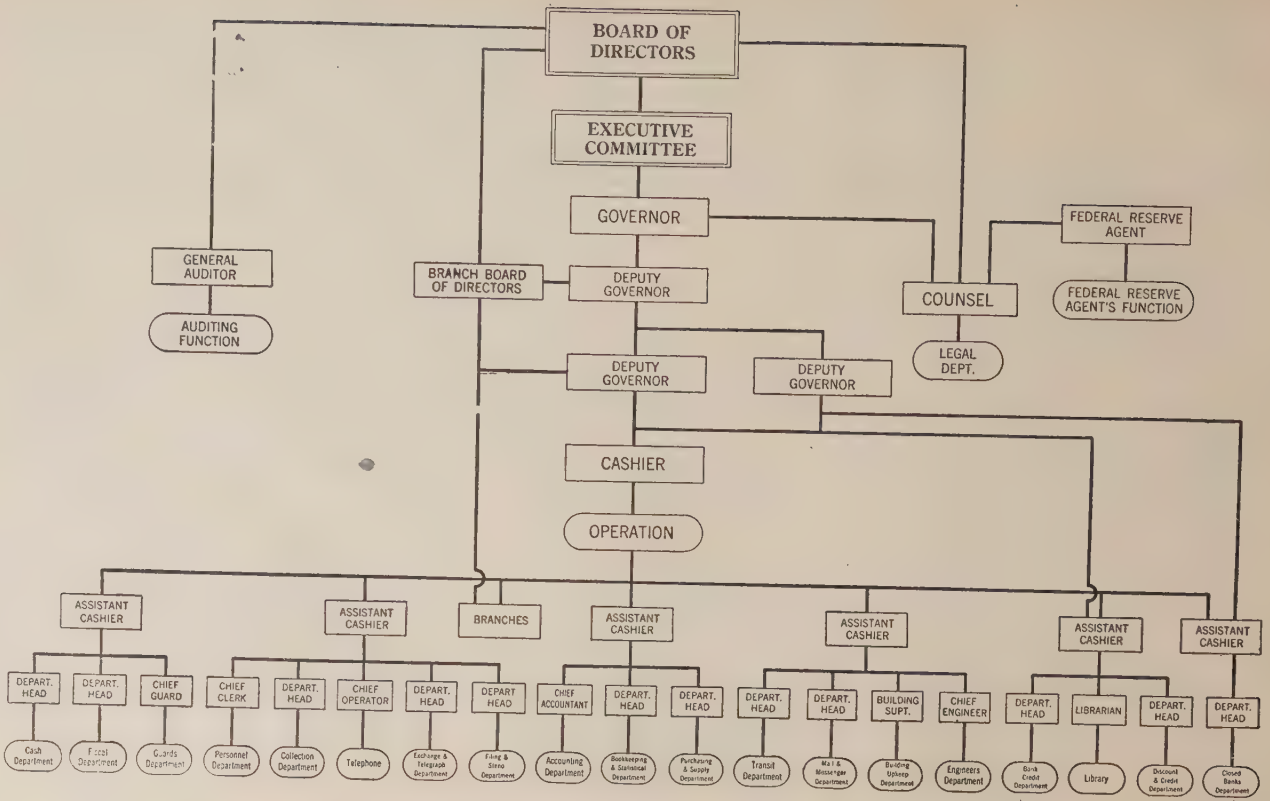


Chart 2. Organization Chart of Federal Reserve Bank of San Francisco, February 1, 1927

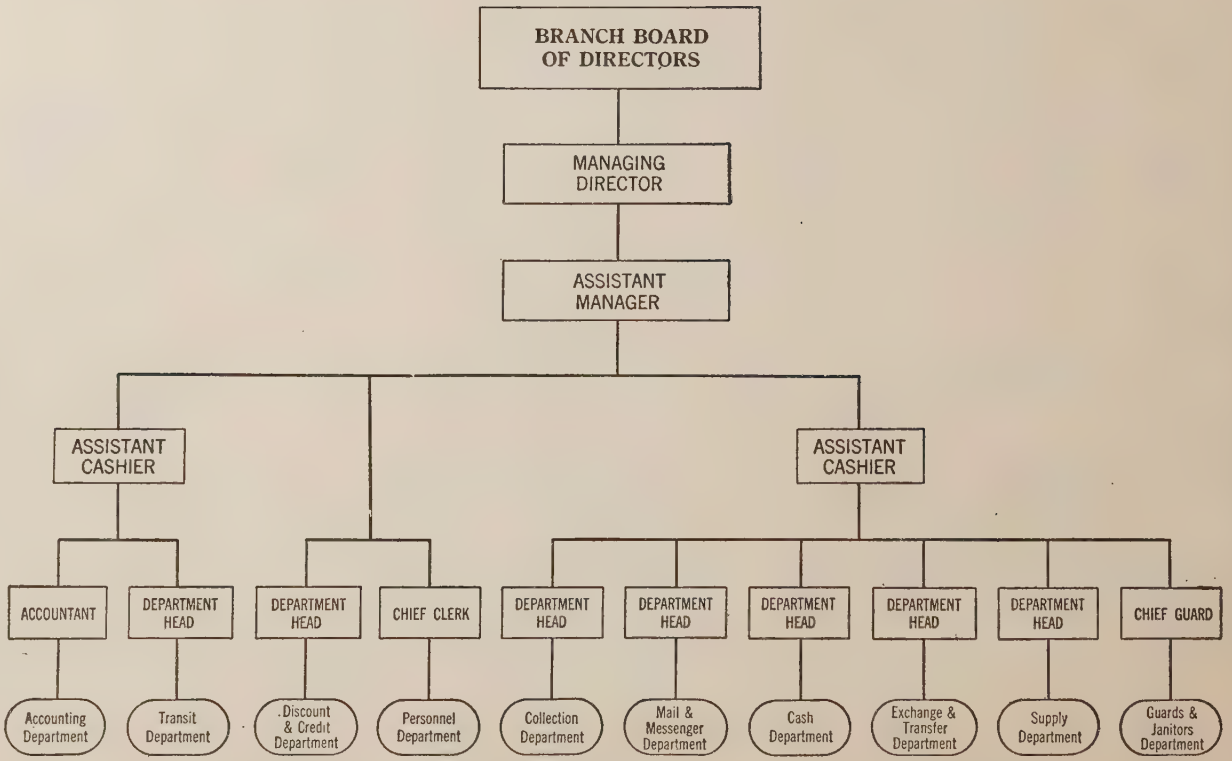


Chart 3. Organization Chart of Los Angeles Branch, Federal Reserve Bank of San Francisco, February 1, 1927

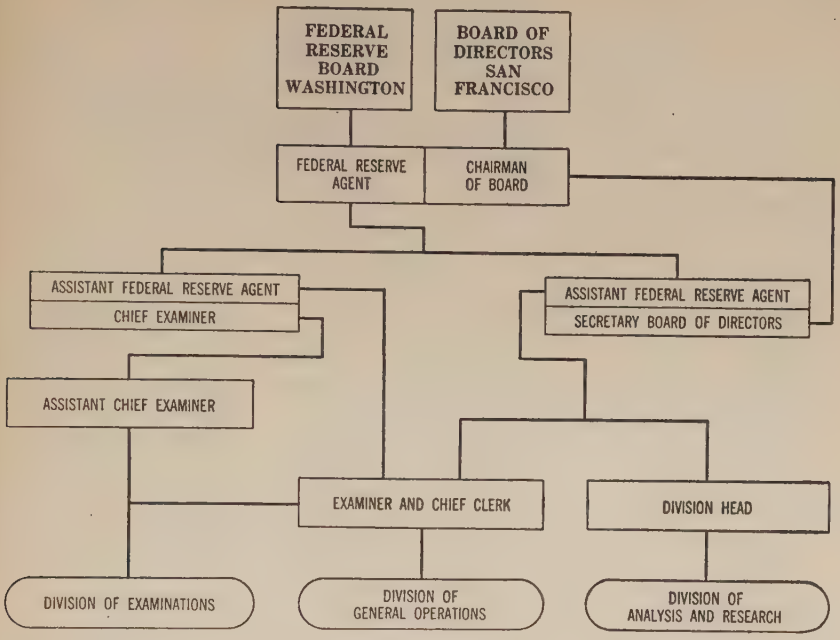


Chart 4. Organization Chart of Federal Reserve Agent and Chairman of Board, Federal Reserve Bank of San Francisco, February 1, 1927

Note: These four charts were kindly supplied by the Federal Reserve Bank of New York and the Federal Reserve Bank of San Francisco, respectively.

669. Capitalization of the Federal Reserve Banks

(a) Why was it necessary for the Government to subscribe most of the capital of the federal land banks but none of the federal reserve banks? (b) From the Report of the Comptroller of the Currency calculate the average total capital and surplus of the member banks. Does the total capital of the federal reserve banks approximate 3 or 6% of the average total capital and surplus of the member banks? What relation should obtain between them? (c) Compare the capitalization of the twelve federal reserve banks. Calculate the ratio of surplus to capital. What is the legal provision for compulsory accumulation of surplus? (d) If the federal reserve banks declared and paid a cash dividend equal to the subscribed capital and kept the right to assess all annual deficits upon members in proportion to their capital and surplus, would not the purposes of capitalization of the federal reserve banks be as well provided for thereafter as now?

670. Statement of the Twelve Federal Reserve Banks

Statement of the Federal Reserve Banks

(000 omitted)

	Combined Federal Reserve Banks			N. Y. Federal Reserve Bank		
	March 16, 1927	March 9, 1927	March 17, 1926	March 16, 1927	March 9, 1927	March 17, 1926
Resources:	$	$	$	$	$	$
Gold with Federal Reserve agents	1,689,080	1,573,277	1,432,402	458,722	372,279	379,220
Gold redemption fund with U. S. Treasury	46,481	47,442	58,431	8,986	10,419	9,206
Gold held exclusively against F. R. notes	1,735,561	1,620,719	1,490,833	467,708	382,698	388,426
Gold settlement fund with F. R. Board	524,085	599,876	688,599	62,795	139,379	189,259
Gold and gold certificates held by banks	764,095	792,066	631,833	506,429	529,669	352,910
Total gold reserves	3,023,741	3,012,661	2,811,265	1,036,932	1,051,746	930,595
Reserves other than gold	161,144	160,619	153,392	32,786	33,815	43,034
Total reserves	3,184,885	3,173,280	2,964,657	1,069,718	1,085,561	973,629
Non-reserve cash	67,896	68,554	66,786	19,073	21,026	24,580
Bills discounted:						
Secured by U. S. Government obligations	175,457	240,074	260,479	35,532	90,801	76,3.2
Other bills discounted	155,056	175,865	220,136	14,034	22,321	27,858
Total bills discounted	330,522	415,939	480,615	49,566	113,122	104,190
Bills bought in open market	218,870	264,685	257,138	42,672	76,340	57,410
U. S. Government securities:						
Bonds	58,364	65,413	63,831	4,859	4,595	1,934
Treasury notes	61,394	80,251	75,418	7,027	11,059	15,459
Certificates of indebtedness	355,582	161,265	213,328	158,986	38,464	116,744
Total U. S. Government securities	475,340	306,929	352,577	170,872	54,118	134,137
Other securities	2,000	2,000	3,610	.....	.....	.....
Foreign loans on gold	.....	.....	7,700	.....	.....	2,110
Total bills and securities	1,026,732	989,553	1,101,640	263,110	243,580	297,847
Due from foreign banks	659	658	712	659	659	712
Uncollected items	844,454	616,499	831,669	214,475	142,197	197,767
Bank premises	58,464	58,460	59,406	16,276	16,276	16,666
All other resources	11,541	12,730	14,134	1,920	2,892	2,495
Total resources	5,194,631	4,919,734	5,039,004	1,585,231	1,512,191	1,513,696
Liabilities:						
Federal Reserve notes in actual circulation	1,706,227	1,718,893	1,659,210	413,986	414,408	371,788
Deposits:						
Member bank—reserve account	2,295,305	2,221,149	2,230,282	865,630	849,194	867,825
Government	2,830	15,139	7,089	202	11,838	428
Foreign bank	4,818	4,650	5,971	936	768	1,376
Other deposits	20,079	19,767	21,305	10,601	12,926	9,991
Total deposits	2,323,032	2,260,755	2,264,647	877,369	874,726	879,620
Deferred availability items	797,302	572,160	761,108	191,318	120,719	165,742
Capital paid in	127,692	127,700	120,394	38,164	38,152	33,871
Surplus	228,775	228,775	220,310	61,614	61,614	59,964
All other liabilities	11,603	11,451	13,335	2,780	2,572	2,711
Total liabilities	5,194,631	4,919,734	5,039,004	1,585,231	1,512,191	1,513,696
Ratio of total reserves to deposit and Federal Reserve note liabilities combined	79.0%	79.7%	75.6%	82.8%	84.2%	77.8%
Contingent liability on bills purchased for foreign correspondents	145,583	96,480	78,975	40,315	27,193	22.7%

(a) How is the reserve ratio determined? What would the actual reserve be if it just equalled the minimum required by law? Of what would it consist? (b) Account for the fact that the total of bills on hand was smaller on March 16, 1927, than on March 17, 1926, both for the Federal Reserve Bank of New York alone and for the system as a whole? (c) Compare each item in the statement of the Federal Reserve Bank of New York with the corresponding item for the system. (d) Why is not an item similar to the "Gold Settlement Fund" found in the statement of the Bank of England?

671. Function of Central Bank in Regulating Credit

The function of a bank of issue is primarily to regulate credit in such a way that it will bear an appropriate relation to demands and requirements of business. This regulation is accomplished partly by the automatic operation of the system itself, which adjusts issues of Federal reserve note currency to demands and requirements of business and partly through the application of discount rates, which must be determined with reference to all of the conditions—economic, industrial, and financial—existing at the time. The factors to be considered in determining the rate policy of a bank of issue include among others, the conditions of the lending banks of the country, the status of the reserve ratio of the Federal reserve banks, the credit accommodations of the Federal reserve banks that can be made available to member banks without impairing the gold reserve required by law, the possibility of gold withdrawals which would impair the ratio, and the general condition of business of the country.—[Report Joint Commission of Agricultural Inquiry, Part 2, p. 85, Washington, D. C., 1921.]

(a) To what extent, if at all, can a central bank regulate credit? (b) Are all the essential factors included in this quotation?

672. Position of the Federal Reserve in the Banking System of the Country

	Per Cent of All Country's Banking Resources Held by Members of the System	Per Cent of All Banks in the Country that are Members of the System	Per Cent of All Bank Deposits in the Country Held by Members of the Federal Reserve System
June 30, 1920	60.6	31.18	60.82
June 30, 1921	59.67	31.62	60.34
June 30, 1922	62.9	32.5	62.05
June 30, 1923	62.5	32.6	61.15
June 30, 1924	62.6	32.88	61.91
June 30, 1925	63.0	33.02	62.36
June 30, 1926	63.0	33.65	62.4

(a) Is the federal reserve gaining in its relative position in the banking system of the country? (b) What are the most significant threats to that position now at work?

673. Member Bank Credit

A comparison of the present high level of member bank loans and investments with the low point reached in the early part of 1922, brings out the fact that during the four years between March 10, 1922, and April 12, 1926, the total volume of member bank credit increased by more than $7,500,000,000. This increase in member bank credit has not been accompanied by a growth in the use of reserve bank credit, since total bills and securities of the reserve banks were no larger in the spring of 1926 than four years earlier. The growth of credit extended by member banks during the period, as has been frequently pointed out, has been on the basis of gold received from abroad. It is the addition of $675,000,000 of imported gold to the member banks' reserves that has enabled them to enlarge their lending and investment operations by about $7,500,000,000 without having recourse to additional accommodations from the reserve banks.—[Federal Reserve Bulletin, August 1926, p. 569.]

The total volume of bills discounted by the federal reserve banks is shown by the table on the following page.

(a) Prepare a chart showing the amount of the bills discounted, by months, from 1914 to 1926 inclusive. (b) On the same chart plot some index of the volume of trade. Do the seasonal and cyclical fluctuations of the two series conform? (c) Using Table III-b of the Appendix which shows the total loans and investments for all member banks, draw a curve on the chart in question (a) above showing the trend of member bank credit outstanding. (Interpolate missing figures.) (d) Why are not the curve for member bank credit and that for bills discounted parallel? (e) At what season or seasons do member banks rediscount most heavily? Why? (f) Prepare a chart showing the movements in: (1) loans and discounts; (2) total investment of all member banks. Do the two items increase or decrease at the same time, or do they move inversely to each other? Give reasons for such movements. (g) In the light of the effect of the net importation of gold, as shown in the excerpt, on the volume of member bank credit and federal reserve bank credit, what would be the probable result if Europe should regain a goodly portion of this gold?

Data for Probem 673

Bills Discounted: Volume, by Months

[In thousands of dollars]

	January	February	March	April	May	June	July	August	September	October	November	December	Total
1926	2,806,899	3,081,456	3,217,081	2,873,342	2,730,344	2,274,908	3,285,302	3,111,183	3,751,745	3,429,897	3,057,952	4,062,028	37,682,137
1925	1,488,088	2,313,147	2,870,496	2,302,621	1,980,725	2,454,713	2,831,228	3,199,367	3,526,517	3,331,110	2,537,966	3,726,642	32,562,620
1924	2,295,565	2,462,407	1,709,329	1,935,590	1,403,502	702,889	733,457	428,508	700,125	839,900	724,757	1,483,126	15,419,155
1923	3,691,259	3,720,547	3,519,700	3,291,071	3,532,513	3,098,131	3,487,407	3,052,050	2,621,961	2,794,852	2,676,799	2,893,636	38,379,926
1922	2,345,365	2,080,372	1,753,098	1,308,055	1,113,930	1,159,318	1,317,602	1,094,307	1,267,358	2,172,114	3,155,775	3,315,593	22,082,887
1921	8,258,163	8,120,849	7,368,268	4,912,652	4,253,864	3,674,977	3,735,078	3,513,063	3,033,109	3,489,268	3,231,271	4,168,566	57,759,128
1920	6,241,271	6,517,439	6,970,331	6,229,740	6,135,984	6,336,642	6,714,924	7,982,524	7,298,972	7,548,456	7,882,933	9,461,658	85,320,874
1919	5,994,382	4,980,936	5,473,564	5,901,402	7,385,833	6,328,912	7,183,435	6,433,662	6,726,155	8,060,318	7,414,498	7,290,873	79,173,970
1918	868,230	762,445	754,934	2,172,580	2,993,019	3,137,226	3,343,458	3,762,259	4,685,140	5,903,963	5,154,597	6,215,083	39,752,934
1917	18,326	22,409	26,789	50,056	91,413	750,270	460,733	220,940	548,164	2,681,166	3,206,487	892,238	8,968,991
1916	11,115	7,665	9,387	11,522	11,195	11,660	20,183	17,352	14,309	11,863	17,904	63,716	207,871
1915	10,713	12,530	13,400	10,549	12,145	13,406	13,238	12,234	14,405	15,051	18,270	15,412	161,353
1914	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,949	11,462	21,411

674. Reserve Bank Credit

In the middle of July the total volume of reserve bank credit was about $100,000,000 larger than a year ago and at about the same level as four years ago. The larger part of the growth in reserve bank credit during the past year has been in discounts for member banks, which were in larger volume in the middle of July than at any other midsummer period from 1922 to 1926, inclusive, excepting 1923, a period when the reserve banks had reduced their security holdings to the lowest point in recent years.

Loans and investments of member banks in leading cities at the end of June were in larger volume than at any previous time, and after declining during the first half of July were still $900,000,000 above the level of a year ago. Of this increase about $385,000,000 was in loans and securities, $340,000,000 in commercial loans, and $175,000,000 in investments. Since the beginning of 1926 an increase in commercial loans, together with the growth of investments, has more than offset the reduction in loans and securities. The demand for credit at the end of the fiscal year and the increased currency requirements over the holiday were reflected in a growth of member bank borrowing at the reserve banks, and on July 7, total discounts were near the highest point of the year. With the return flow of currency from circulation after the holiday, discounts declined and on July 21 were in about the same volume as in the last half of June. The reserve banks' holdings of acceptances and of United States securities changed little during the period, and the total volume of reserve bank credit outstanding in the third week of July was close to the June level.—[Federal Reserve Bulletin, August, 1926, pp. 569, 571.]

The following tables show the monthly volume of discount and open market operations by classes of reserve bank credit from 1914 to 1926 inclusive.

(a) Draw charts showing the changes in each of these items for the six-year period. Superpose and group these curves so as to bring out the significant relationships. In this connection use also a curve showing the total reserve credit outstanding. (b) What, if any, is the relationship between the volume of reserve bank credit and business conditions? (c) Does the amount of bills purchased and United States securities held vary inversely with the amount of bills discounted? Explain.

Data for Problem 674

Discount and Open-Market Operations: Monthly Volume, by Classes

(In thousands of dollars)

Month	Total (all Classes)	Bills Discounted for Member Banks [1]						Acceptances Purchased in Open Market				United States Securities Purchased in Open Market [2]					Other Securities [4]
		Total	Member Bank Collateral Notes	Commer. and Agric. Paper, n. e. s.	Demand and Sight Drafts	Bankers' Acceptances	Trade Acceptances	Total [3]	Bought Outright: Bankers'	Bought Outright: Trade	Bought with Resale Agreement	Total	Bought Outright: Bonds	Bought Outright: Treasury Notes	Bought Outright: Certificates of Indebtedness	Bought with Resale Agreement	
1926																	
January	3,034,567	2,806,899	2,650,227	153,168	2,072	.....	1,432	199,202	126,473	527	71,979	28,266	2,742	180	2,364	22,980	200
February	3,371,797	3,081,456	2,956,153	123,288	1,213	.....	802	245,483	107,779	546	136,885	35,358	510	362	2,109	32,377	9,500
March	4,163,361	3,217,081	3,002,321	211,907	724	102	2,027	242,686	104,390	166	137,364	699,359	14,042	46,435	583,203	55,679	4,235
April	3,222,945	2,873,342	2,716,729	154,339	427	.....	1,847	260,514	122,896	400	136,781	85,889	32,326	24,562	12,068	16,933	3,200
May	3,149,702	2,730,344	2,575,159	153,803	203	.....	1,089	364,484	150,591	326	213,159	45,174	4,795	5,191	408	34,780	9,700
June	3,225,401	2,274,908	2,122,278	150,461	363	28	1,778	318,368	153,993	173	163,280	631,625	10,755	71,384	507,242	42,244	500
July	3,595,539	3,285,302	3,122,933	160,013	575	15	1,766	244,287	128,681	755	114,777	64,850	11,200	9,312	2,950	41,388	1,100
August	3,362,974	3,111,183	2,965,821	143,512	354	.....	1,496	226,240	163,826	5	61,442	25,051	1,366	168	232	23,285	500
September	4,380,690	3,751,745	3,577,034	172,167	999	10	1,535	234,255	136,366	867	96,557	394,690	15,077	3,453	349,790	26,370	.....
October	3,736,689	3,429,897	3,241,679	183,600	1,954	.....	2,664	263,286	171,289	153	91,350	41,497	5,719	4,023	6,906	24,849	2,000
November	3,480,262	3,057,952	2,895,937	158,129	2,419	20	1,447	329,564	148,890	628	178,946	92,682	13,261	9,331	29,945	40,145	64
December	4,950,656	4,062,028	3,870,710	187,602	1,283	.....	2,433	424,957	178,687	1,045	244,545	463,604	25,369	26,481	353,092	58,662	67
Total: 1926	43,674,574	37,682,137	35,696,981	1,951,989	12,676	175	20,316	3,353,326	1,693,861	5,591	1,647,065	2,608,045	137,162	200,882	1,850,309	419,692	31,066
1925	37,891,421	32,562,620	30,928,464	1,586,562	23,850	56	23,688	2,961,170	2,951,923	4,765	(5)	2,317,082	38,037	95,625	1,479,874	703,546	50,549
1924	19,863,473	15,419,155	12,456,575	2,877,127	46,621	507	38,325	2,172,142	2,163,690	8,452	(5)	2,257,018	118,312	433,920	1,378,172	226,614	15,158
1923	44,428,375	38,379,926	29,916,868	8,340,676	67,457	3,532	51,393	2,547,010	2,533,470	13,540	(5)	3,500,903	87	51,025	2,304,081	1,083,960	536
1922	28,543,552	22,082,887	15,683,483	6,351,716	.....	3,416	44,272	1,954,688	1,948,379	6,309	(5)	4,505,801	[6]350,196	818,972	3,336,633	(5)	176
1921	63,141,608	57,759,128	31,229,142	26,343,947	.....	57,095	128,944	1,534,401	1,527,235	7,166	(5)	3,847,094	[6] 38,532	65,898	3,742,664	(5)	985
1920	96,527,548	85,320,874	55,565,447	29,376,108	.....	187,162	192,157	3,218,364	3,143,737	74,627	(5)	7,988,310	[6]332	.....	7,987,978	(5)	.....
1919	86,737,067	79,173,970	72,548,008	6,415,899	.....	71,643	138,420	2,825,177	2,788,619	36,558	(5)	4,737,920	[6] 1,757	.....	4,736,163	(5)	.....
1918	47,414,531	39,752,934	33,007,788	6,537,833	.....	19,940	187,373	1,809,539	1,748,503	61,036	(5)	5,850,348	73,996	520	5,775,832	(5)	1,710
1917 [7]	10,152,126	8,968,991	7,742,806	1,188,414	.....	.....	37,771	1,077,713	1,046,765	30,948	.....	88,600	81,537	7,063	.....	.....	16,822
1916	741,492	207,871	38,967	163,692	.....	.....	5,212	386,095	369,762	16,333	.....	56,750	56,450	300	.....	.....	90,686
1915	307,771	161,353	.....	159,394			1,959	64,845	64,814	31	.....	15,714	15,714	.....	.....	.....	65,859
1914	22,293	21,411	.....	21,411			.....	.....	.....	.....	.....	205	205	.....	.....	.....	677

[1] Includes agricultural paper discounted for Federal intermediate credit banks. [2] Includes special temporary certificates issued to Federal reserve banks by the Secretary of the Treasury; also, prior to 1922 securities, if any, purchased from other Federal reserve banks in addition to purchases in open market, separate figures not being available. [3] Includes bills payable in foreign currencies. [4] Represents foreign loans on gold, Federal intermediate credit bank debentures and municipal warrants as follows: Foreign loans on gold, 1926—January $200,000, February $9,500,000, March $2,100,000, April $700,000, May $9,000,000, June $500,000, July $1,100,000; 1925—$41,585,000; 1924—$6,000,000; Federal intermediate credit bank debentures: 1926—March $2,135,000, April $2,500,000, May $700,000, August $500,000, October $2,000,000; 1925, $8,900,000; 1924, $9,100,000; Municipal warrants, 1926, November $64,000, December $67,000; 1925, $64,000; 1924, $58,000. Figures for prior years represent municipal warrants. [5] Included in preceding columns. [6] Includes Victory notes. [7] Data for years 1914 to 1917 inclusive were taken from Federal Reserve Board's Report, 1925. [8] Reports 1924 and 1925 give for this figure, 77,487 [Report Federal Reserve Board, 1926, p. 896.]

Data for Problem 674

Total Discount and Open-Market Operations: By Months

(In thousands of dollars)[1]

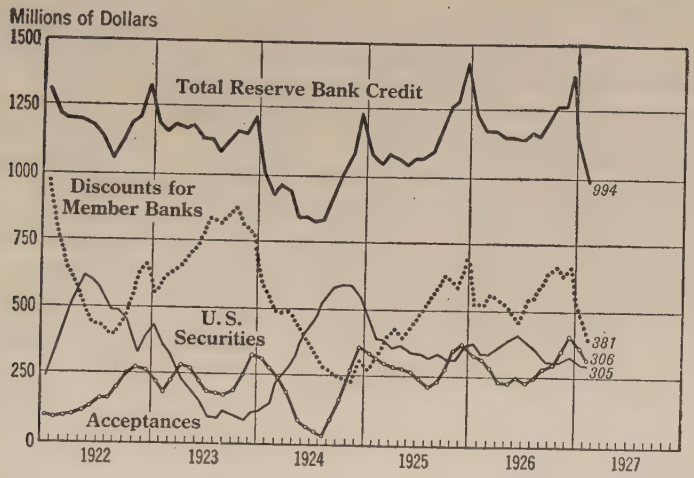
Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
1926	3,034,567	3,371,797	4,163,361	3,222,945	3,149,702	3,225,401	3,595,539	3,362,974	4,380,690	3,736,680	3,480,262	4,950,656	43,674,574
1925	1,735,088	2,622,500	3,711,694	2,572,047	2,348,836	2,967,676	3,117,593	3,433,052	4,168,631	3,738,562	2,878,847	4,596,895	37,891,421
1924	2,612,539	2,811,485	2,491,195	2,164,953	1,559,961	1,034,596	901,940	543,599	1,138,133	1,180,438	1,089,168	2,335,466	19,863,473
1923	5,612,099	4,024,196	3,970,254	3,543,495	3,876,835	3,575,386	3,765,951	3,296,502	2,980,549	3,096,430	3,111,979	3,574,699	44,428,375
1922	2,646,595	2,522,410	2,597,127	1,646,968	1,382,349	2,101,432	1,586,399	1,469,069	1,915,587	2,812,551	3,397,691	4,465,374	28,543,552
1921	8,654,134	8,309,185	7,967,010	5,084,648	5,040,858	4,799,534	3,847,005	3,663,163	3,650,263	3,729,581	3,525,792	4,870,435	63,141,608
1920	7,186,317	7,122,048	8,770,100	7,474,478	6,452,944	7,800,839	7,518,907	8,366,571	8,447,267	8,013,276	8,715,061	10,659,740	96,527,548
1919	7,025,336	5,454,819	5,706,085	6,125,884	7,620,107	6,771,913	7,692,825	6,808,747	8,801,292	8,468,032	7,812,081	8,449 946	86,737,067
1918	1,525,985	1,443,795	1,993,080	2,605,720	3,309,207	3,655,664	3,490,037	3,955,612	4,953,969	6,793,019	5,569,709	8,118,734	47,414,531
1917	49,105	99,503	66,495	95,739	174,129	887,502	547,434	297,024	678,063	2,770,806	3,394,417	1,091,909	[2]10,152,126
1916	37,151	40,029	50,981	50,861	48,200	60,785	64,355	47,902	58,680	63,282	79,645	139,531	741,402
1915	23,450	20,346	26,835	17,839	20,243	23,179	27,048	29,375	23,556	23,961	38,179	33,760	307,771
1914	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,949	12,344	22,293

[1] Prior to 1922, figures include securities, if any, purchased from other Federal reserve banks in addition to purchases in open market. Separate figures not available.

[2] Includes $170,072,483 of acceptances purchased from the Federal reserve banks of Boston and New York by other Federal reserve banks. Excludes purchases of United States certificates of indebtedness, figures of which are not available.

[Report Federal Reserve Board, 1926, p. 87.]

675. Federal Reserve Bank Credit



Monthly Averages of Daily Figures for Twelve Federal Reserve Banks.
[*Monthly Review*, Federal Reserve Bank of New York.]

(a) Is there a seasonable variation evident in the total credit of the federal reserve banks? Is it equally evident in the volume of rediscounting done for member banks? Is it evident in the volume of acceptances owned? (b) Is there an inverse variation evident between the volume of rediscounting for member banks and the volume of acceptances owned, or is it direct? What would each type of variation indicate as to federal reserve policy? (c) Is there an inverse variation between the volume of rediscounting for member banks and the volume of United States securities owned? What does this indicate as to federal reserve policy? (d) Taking the period 1922 to 1926, is there an upward trend in acceptances owned? in rediscounting for member banks? in United States securities owned? in total reserve bank credit? What has been the course of the business cycle during these years? (e) Why are the years before 1922 not good for interpreting current federal reserve policy?

The interpretation of federal reserve credit policy will be facilitated if the student will plot, on a chart similar to the above, the figures for the corresponding items in the banks that report weekly to the Federal Reserve Board. These figures are given in the Federal Reserve Bulletin.

676. Control of Credit

The normal and traditional method of credit control has been the discount rate; its efficacy, however, presupposes normal conditions. An advance in rate operates under normal conditions not only to diminish the demand for credit by making certain activities unprofitable but as well to increase the supply of credit by attracting it from other centers or countries. The conditions that make this conditional control effective do not all exist at the present time. The United States stands almost alone as an important free gold market. Other countries are seeking and have obtained large credits in the United States, as is evidenced by the fact that our exports exceeded imports during the year by about four billions of dollars, and we have paid our adverse balances in gold. It should be recognized that credits extended to Europe create a demand for commodities that competes with the domestic demand and this competition is one of the potent causes of high prices. The demand for commodities from domestic as well as foreign sources is so far in excess of the supply that the increased cost of credit due to an advance in rates is absorbed in the price, and speculations, anticipating large profits, is not checked by any reasonable advance in rates of interest. These conditions are all adverse to an easy and effective operation of credit control by means of discount rates.

Nevertheless, the discount rate is an indispensable factor in the regulation and control of credit. When there are legal limitations on the rates member banks may charge, a high reserve bank rate has a restraining influence upon them and upon their customers.

Although there are no specific limitations imposed upon the amount of borrowings by member banks at the Federal Reserve Banks, there is a potential limitation provided for in the act. In that part of section 4 which relates to the duties of the board of directors of a Federal Reserve Bank there is the following: "Said board shall administer the affairs of said bank fairly and impartially and without discrimination in favor of or against any member bank or banks and shall, subject to the provisions of law and the orders of the Federal Reserve Board, extend to each member bank such discounts, advancements, and accommodations as may be safely and reasonably made with due regard for the claims of other member banks.—[Annual Report, Federal Reserve Board, 1919, p. 70.]

(a) What is credit control? What is the purpose of credit control? (b) Show how an increase in the rediscount rate controls or tends to control credit under normal conditions. (c) What other means, if any, has the Federal Reserve Board used to influence the extension of credit by member banks? (d) Should the reserve ratio be used as a basis for raising and lowering the discount rate?

677. Changes in State Bank Membership

The Federal Reserve Act provides that state banks and trust companies may voluntarily become members of the Federal Reserve System under certain conditions. Section 9 contains the following regarding state bank membership:

Any bank incorporated by special law of any State, or organized under the general laws of any State or of the United States, desiring to become a member of the Federal Reserve System, may make application to the Federal Reserve Board, under such rules and regulations as it may prescribe, for the right to subscribe to the stock of the Federal reserve bank organized within the district in which the applying bank is located. Such application shall be for the same amount of stock that the applying bank would be required to subscribe to as a national bank. The Federal Reserve Board, subject to such conditions as it may prescribe, may permit the applying bank to become a stockholder of such Federal reserve bank.

The actual changes in the state bank membership from year to year is shown in the table on the following page (Annual Report of the Federal Reserve Board, 1925, p. 176; 1926, p. 188):

ANNUAL CHANGES IN NUMBER (1915–1926) AND IN RESOURCES (1919–1926) OF MEMBER BANKS, BY CLASS OF BANK

	NUMBER OF BANKS											
	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
STATE MEMBER BANKS												
Membership, first of year	8	31	37	253	930	1,181	1,481	1,614	1,639	1,595	1,544	1,441
Total additions	23	7	219	683	289	342	207	97	74	46	43	44
Admission of State bank	22	7	218	683	284	336	204	95	66	41	40	32
Conversion of national bank	1	.....	1	.....	[5]5	6	3	1	6	[4]3	1	.....
Absorption of nonmember	.....	.....	.....	.....	.....	.....	.....	.....	.....	(6)	(7)	[8]8
Resumption following suspension	.....	.....	.....	.....	.....	.....	.....	1	2	2	2	4
Total losses	0	1	3	6	38	42	74	72	118	97	146	131
Merger between State members	.....	.....	.....	1	3	9	10	12	16	9	11	19
Absorption of national bank	.....	.....	.....	1	4	2	7	7	5	8	6	.....
Conversion to national bank	.....	.....	1	1	[3,4]12	10	17	[4]21	29	6	45	.....
Voluntary liquidation [1]	.....	.....	.....	.....	4	3	3	8	4	5	1	3
Suspension and insolvency	.....	.....	.....	.....	.....	3	16	10	33	37	29	36
Absorption by nonmember	.....	.....	.....	.....	2	3	2	1	.....	5	14	4
Conversion to nonmember	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	...2
Withdrawal	.....	1	.....	.....	9	12	[6]19	13	29	[6]26	[6]39	59
Other decrease	.....	.....	[7]2	[7]3	[7]4	.....	.....	.....	1	.....	.....	8
Net change	+23	+6	+216	+677	+251	+300	+133	+25	−44	−51	−103	−87
Membership, end of year	31	37	253	930	1,181	1,481	1,614	1,639	1,595	1,544	1,441	1,354

[1] Excludes voluntary liquidations intermediate in some further change in the status of banks; such instances are classified according to the ultimate status of the banks.
[2] Includes successions of State member banks by nonmember banks.
[3] One national bank succeeded a State member and a national bank.
[4] Member bank of one class succeeded by one of the other class, the latter not reporting until the next year.
[5] Two national banks succeeded by a single State member bank.
[6] Includes compulsory withdrawal of five banks in 1921, one bank in 1924, and two banks in 1925 with aggregate resources of $2,027,000.
[7] Nonpayment on Federal reserve bank stock.
[8] Other additions.

	Total Resources (in thousands of dollars)							
	1919	1920	1921	1922	1923	1924	1925	1926
State Member Banks								
Membership, first of year	7,482,113	9,913,707	9,826,794	9,904,860	11,917,017	12,843,303	14,617,876	15,585,845
Total additions								
Admission of State bank	994,171	1,037,827	224,958	201,758	137,830	60,771	139,865	
Conversion of national bank								
Absorption of non-member						29,618	2,470	
Resumption following suspension				448	793	967	468	
Total losses								
Merger between State members								
Absorption of national bank	16,310	3,500	10,442	15,215	7,035	8,508	31,418	
Conversion to national bank	92,475	122,648	93,556	94,144	155,420	44,892	173,236	
Voluntary liquidation[1]	36,609	9,634	8,699	21,287	1,886	3,056	1,560	
Suspension and insolvency		2,126	28,389	2,844	20,406	24,538	16,155	
Absorption by non-member	7,457	8,437	3,823	3,603		2,406	13,768	
Conversion to non-member					6,813	202	332	
Withdrawal	3,523	18,597	25,370	24,842	132,409	66,879	32,008	
Other decrease	6,245							
Net change	+2,431,594	−86,913	+78,066	+2,012,157	+926,286	+1,774,573	+967,969	
Membership, end of year	9,913,707	9,826,794	9,904,860	11,917,017	12,843,303	14,617,876	15,585,845	16,360,575

[1] Excludes voluntary liquidations intermediate in some further change in the status of banks; such instances are classified according to the ultimate status of the banks.

(a) Summarize the general requirements for state bank membership. (b) What changes, if any, have been made since the original act was passed to encourage state banks to become members? (c) Summarize the advantages of membership to state banks and trust companies. (d) What arguments are usually advanced against state bank membership? (e) How do you account for the slow growth in state bank membership during 1914 to 1917, inclusive? (f) Why have state banks been withdrawing from the system since 1922?

678. Proposed Changes in the Membership of the Federal Reserve Board

On May 9, 1921, Senator Capper introduced a bill in the United States Senate which provided for some very important changes in the personnel of the Board. Section 10 of the Federal Reserve Act was to be amended according to this bill to read as follows:

Sec. 10. A Federal Reserve Board is hereby created which shall consist of eight members, including the Secretary of the Treasury, the Secretary of Agriculture, the Secretary of Commerce, and the Comptroller of the Currency, who shall be members ex-officio, and five members appointed by the President of the United States, by and with the advice and consent of the Senate. In selecting the five appointive members of the Federal Reserve Board, not more than one of whom shall be selected from any one Federal reserve district, the President shall have due regard to a fair representation of the different commercial, industrial, and geographical divisions of the country. The five members of the Federal Reserve Board appointed by the President and confirmed as aforesaid shall devote their entire time to the business of the Federal Reserve Board and shall each receive an annual salary of $12,000, payable monthly together with actual necessary travelling expenses, and the Comptroller of the Currency, as ex-officio member of the Federal Reserve Board, shall, in addition to the salary now paid him as Comptroller of the Currency, receive the sum of $7,000 annually for his services as a member of said board.—[67th Congress, 1st session, May 1921, S. 1719.]

(a) What were the underlying reasons for such proposed changes? (b) Do you think a Board as constituted under this act would be any more effective than the Board as constituted at the present time? (c) What are the basic reasons why the Secretary of Agriculture and the Secretary of Commerce should be included or placed on this Board? For similar reason why not add the Secretary of Labor in order to give Labor a representative on the Board?

679. Position of National and State Bank Members in Federal Reserve System

	Per Cent of Resources of Members of the Federal Reserve System Furnished by State Bank Members		Per Cent of Deposits in All Members of the Federal Reserve System Held by State Bank Members		Per Cent of All Bank Deposits in the Country Held by National Banks
	National	State	National	State	
June 30, 1920	68.91	31.09	67.59	32.41	41.10
June 30, 1921	66.23	33.77	65.19	34.81	39.33
June 30, 1922	65.25	34.75	63.94	36.06	39.67
June 30, 1923	63.62	36.38	62.81	37.19	38.17
June 30, 1924	63.04	36.96	62.11	37.89	38.44
June 30, 1925	62.24	37.76	61.38	38.62	38.28
June 30, 1926	61.94	38.06	61.18	38.82	38.15

(a) What is the cause and the significance of the trends indicated by these percentages? (b) What are the reasons why the resources of the national banks tend to be a smaller percentage of the resources

of the Federal Reserve System? (c) What is the significance of the fact that the proportion of deposits is declining more slowly than of resources?

680. Changes in State Bank Membership of Federal Reserve System

Additions	1922	1923	1924	1925	Total
Admission of state banks	95	66	41	40	242
Conversion of national banks	1	6	3	1	11
Gains in state bank membership	96	72	44	41	253
Losses					
Voluntary liquidations	8	4	5	1	18
Suspension or Insolvency	10	33	37	29	109
Merger between state members	12	16	9	11	48
Absorption by national banks	7	5	8	6	22
Conversion to national banks	21	29	6	45	101
Absorption by nonmembers	1		5	14	20
Conversion to nonmembers		1	1	1	3
Withdrawals	13	29	26	39	107
Total losses	72	117	97	146	432

(a) Determine the causes of the variations in the losses for each of the reasons cited. (b) Forecast the future trend of losses for each reason.

681. Losses in Number of National Banks

	1922	1923	1924	1925	Total
Total losses	170	231	267	234	902
Mergers between national banks	48	41	44	42	175
Absorption by state members	39	23	22	12	96
Conversion to state members	1	7	2	1	11
Voluntary liquidations	15	20	27	12	74
Suspension and insolvency	38	92	128	118	376
Absorption by nonmembers	18	35	30	28	111
Conversion to nonmembers	9	13	14	21	57

(a) Discover the causes of the variation in the various causes of loss in number of national banks in recent years. (b) Forecast the future drift in each of these factors.

682. Position of the National Banks in the Banking System

	Per Cent of All Banks in the Country which Hold National Charters	Per Cent of Country's Banking Resources Held by National Banks
June 30, 1920	26.62	41.80
June 30, 1921	26.45	39.52
June 30, 1922	27.12	41.07
June 30, 1923	27.29	39.79
June 30, 1924	27.54	39.47
June 30, 1925	27.96	39.22
June 30, 1926	28.62	39.00

(a) What is the drift of the percentage which the number of national banks bears to all banks? How is this possible when the number of national banks has been declining since 1922? (b) What is the drift of the percentage which the assets of the national banks bears to the assets of all banks? How is this possible in the light of the fact that the percentage of the number of banks is increasing?

683. Increases in Number of National Banks

	1922	1923	1924	1925	Total
Total additions	225	190	131	239	785
Newly organized	76	93	89	120	378
Conversion of state members	20	30	6	45	101
Resumption following suspension	19	11	17	5	52
Conversion of nonmembers into national banks	110	56	19	69	254

(a) Give the causes of the variations in each source by which the number of national banks has been increased. (b) Forecast the probable trend of each source during the coming decade.

684. Effect of Paying Out Gold Certificates Instead of Federal Reserve Notes

RESERVES OF FEDERAL RESERVE BANKS

(000,000 omitted)

	June 30, 1922	June 2, 1926	
		Actual	Hypothetical
Total deposits	$1,883	$2,261	$2,261
Federal reserve notes in circulation	2,153	1,704	2,604
Total reserves	3,145	2,946	3,846
Ratio of total reserves to deposit and note liabilities combined (per cent)	77.9	74.3	79.1

COMPOSITION OF CURRENCY

	July 1, 1922	June 1, 1926	Change
Gold certificates	$ 173	$1,074	+ $901
Federal reserve notes	2,139	1,694	− 445
Other currency and coin	2,064	2,103	+ 39
Total	$4,376	$4,871	+$495

[Federal Reserve Bulletin, 7–1926, p. 473.]

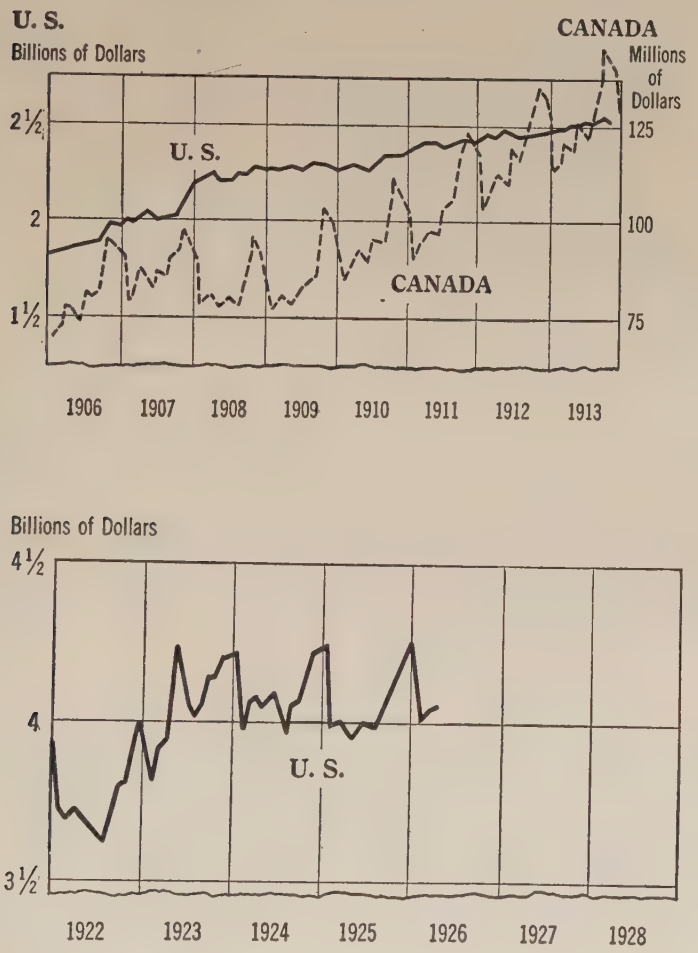
(a) How much did gold certificates in circulation increase in these four years? federal reserve notes decrease? (b) If federal reserve banks had paid out federal reserve notes instead of gold certificates, how would the volume of notes and reserves have been affected? How would the reserve rates have been affected? (c) Study the reason why this $90 million change in reserves would affect the reserve rates so little as 5%. (d) Is there any propriety in considering most of the gold in actual circulation as reserves against federal reserve notes?

685. Issuing Federal Reserve Notes

Let us assume that one of the federal reserve banks on a certain day, September 1, 1923, estimated that it would need $1,500,000 in federal reserve notes, for the purpose of meeting the demand for additional currency in moving the crops.

(a) Outline in detail the federal reserve bank's procedure in procuring such notes, showing how and to whom application is made. (b) How and by whom are these notes prepared? (c) What are the legal requirements regarding the reserve to be maintained against them, including form, amount, and place where kept. (d) What legal provisions are made for retiring these notes when no longer needed? (e) Are the notes destroyed when they are returned to the federal reserve agent?

686. Federal Reserve Increases Elasticity of Currency



Currency in Circulation Before and After the Establishment of the Federal Reserve System

(a) Do the charts indicate that currency in the United States before the Federal Reserve System was elastic? (b) How did the Federal Reserve accomplish elasticity of the currency?

687. Reserves Against Federal Reserve Notes

I. Federal Reserve Agents' Accounts, June 2, 1926:		
(1) Federal reserve notes received from the Comptroller of the Currency		$2,850,398
(2) Federal reserve notes held by federal reserve agents		860,303
(3) Federal reserve notes issued to federal reserve banks		$1,990,095
(4) Collateral held as security for federal reserve notes issued to federal reserve banks:		
(5) Gold and gold certificates	$ 304,153	
(6) Gold redemption fund	104,847	
(7) Gold fund, with Federal Reserve Board	1,041,150	
(8) Eligible paper	740,276	2,190,426
(9) Collateral in excess of federal reserve notes issued to federal reserve banks		200,331
II. Federal Reserve Notes:		
(10) Their own notes held by federal reserve banks in their own vaults on June 2, 1926		285,959
(11) Federal reserve notes in circulation		1,704,136

(a) What reserve, if any, must be held against item (1)? item (2)? item (3)? item (10)? item (11)? (b) Is there any reason why the federal reserve bank would keep item (8) larger than necessary? Is such excess of any advantage to the federal reserve agent? What costs or savings come to the federal reserve bank from pledging paper with the federal reserve agent? (c) What portion of the federal reserve notes issued to federal reserve banks is not covered by gold? Why should the federal reserve agent be required to carry a 5% redemption fund against the notes covered by gold?

688. Progressive Rates of Discount

Be It Enacted by the Senate and House of Representatives of the United States of America in Congress Assembled, That section 14 of the Federal Reserve Act as amended by the acts approved September 7, 1916, and June 21, 1917, be further amended by striking out the semicolon after the word "business" at the end of the subparagraph (d) and insert in lieu thereof the following: "and which, subject to the approval, review, and determination of the Federal Reserve Board, may be graduated or progressed on the basis of the amount of the advances and discount accommodations extended by the Federal Reserve Bank to the borrowing bank. Approved, April 13, 1920."

[Federal Reserve Bulletin, May 1920, p. 498.]

As thus adopted, the Phelan Act provided for so-called progressive rates of discount, by establishing a basic line of credit beyond which further extensions of loans to banks should be made only at an increasing rate. The thought was that, after a bank had obtained a certain amount of rediscount credit, the cost of further accommodation would become so heavy as to lead it to refrain from making further obligation, so that the reserve banks would not be subjected to the embarrassment of having to refuse accommodation on the ground that the member was already unduly extended and ought not to have more.

The basic line adopted by the Atlanta, St. Louis, and Kansas City banks was two and one-half times a sum equal to 65 per cent of the member bank's average reserve balance, plus its paid-in subscription to the capital stock of the federal reserve bank, both calculated over a fixed period to which the basic line applied. For the Dallas district, however, a basic discount line was adopted equal to the paid-in capital and surplus of the member bank. Atlanta and St. Louis applied the normal rate, i.e., the generally effective rate to all offerings for rediscount, and applied a progressive "super-rate" at the end of the reserve computation period to the average borrowings in excess of the basic line; while Kansas City and Dallas imposed the "super-rate" upon such part of the current offering as might, together with outstanding borrowings, be in excess of the basic line. As a scale of rates, all four banks adopted an increase of one-half of 1 per cent for anything up to 25 per cent in excess of the basic line, with 1 per cent for the second 25 per cent excess, and so on upward. Exceptions to this progressive rate plan were generally made in case of member-bank collateral notes secured by Government obligations, although some variation in method of making exceptions had been introduced in the four banks where the plan had been in effect.—[H. P. Willis, The Federal Reserve System, pp. 1341-1343, The Ronald Press Company, New York.]

NOTE: The student is urged to read Chapter LIX, Willis, Federal Reserve System, and Annual Report Federal Reserve Board, 1920, pp. 57-60.

(a) Wherein does a progressive rate differ from the rate now in effect at the federal reserve banks? (b) What should be the real test of the purpose of a rediscount transaction? Is that in harmony with the theory of the progressive rate? (c) Criticize this plan. (d) How successful was this method of controlling credit?

689. Federal Reserve Bank Reserves

During the period of the war the reserve ratio of Federal reserve banks was steadily declining, and with the exception of a slight rise in the early part of 1919 during the period of temporary deflation, continued to fall during 1919. By December it had reached 44.8 and by May, 1920, was down to 42.7. At this time the unadjusted ratio—that is, the ratio of the reserves to deposit and currency liabilities before adjustment of these ratios by borrowings from other reserve banks—had fallen far below 40% in many of the reserve districts, particularly those in the South and West.

In many of the districts, notably in the Atlanta, Minneapolis, Kansas City, and Dallas districts, the unadjusted reserve ratio fell below 20% at some time during the last half of 1920. At one time during 1920 seven of the Federal reserve banks were borrowing from the other five banks.—[Report Joint Commission of Agricultural Inquiry, Part II, p. 89, Washington, D. C., 1921.]

(a) How do you account for the steady decline in the reserve ratio during the war? (b) Explain how funds could be easily and quickly transferred to Dallas to make up for the low reserve ratio in 1920.

(c) What could have been done if the whole system had fallen to 35%. (d) Is one federal reserve bank required to lend to another federal reserve to restore a depleted reserve?

690. What is the Gold Settlement Fund?

The Federal Reserve Board in its annual report for 1915 made the following statement regarding the establishment of a Gold Settlement Fund:

> Section 16 of the Federal Reserve Act made general provision for the establishment of a system of clearance of checks throughout the United States, each Federal Reserve Bank being required to act as a clearing house for its members if directed by the Federal Reserve Board, while the Federal Reserve Board was authorized to clear for the reserve banks themselves.
>
> The Board had from the first recognized its duty to make this provision of the law effective as fully and at as early a date as conditions would permit; and in its first report spoke of this as "one of the most important responsibilities with which it is charged under the Act." So, regarding its duty in this particular, it undertook early in 1915 the preparation of a general circular and regulations intended to provide for the clearing of checks within the several Federal reserve districts, while it also took under advisement the establishment of a gold settlement fund at Washington for the purpose of clearing obligations between Federal Reserve Banks. The latter undertaking has been carried to a successful conclusion and the gold settlement fund has been in full and satisfactory operation since about the first of June. The Board, however, had not advanced far with its work relating to the intra-district branch of the clearance system before technical and other difficulties began to make their appearance. Many banks, both city and country, throughout the system were opposed to the enforcement of the provisions of the law because of the loss of exchange charges which would thereby be entailed upon them. Legal questions were also raised, it being argued that there is no power to compel a member bank not located in a federal reserve city to pay or have charged to its account at the Federal Reserve Bank of its district a check which it had seen and approved prior to the time of presentation at its own counter.

The general scope and extent of the operations of this fund from 1915 to 1926, inclusive, is fully shown by the table on the following page.

(a) Explain how this fund was originally built up and how it is maintained. (b) Account for the fact that there has been a gradual increase in the amount of gold held in this fund. (c) Is it not a fact that there is a large loss to the federal reserve banks due to the large volume of gold lying idle in the Treasury vaults in Washington? (d) What is the economic significance of the Gold Settlement Fund?

Data for Problem 690

Gold Settlement Fund: Summary of Transactions Through the Fund

[In thousands of dollars]

Federal Reserve Bank	Balance Jan. 1	Daily Settlements Between Federal Reserve Banks				Inter-Reserve Bank Transfers [1]		Withdrawals	Deposits	Balance in Fund at Close of Business Dec. 31	Net Loss or Gain of Gold Through			
		Transit Clearings		Federal Reserve Note Clearings							Transit Clearings [2]		Combined Clearings & Transfers	
		Payments	Receipts	Payments	Receipts	Payments	Receipts				Loss	Gain	Loss	Gain
1926														
Boston	32,809	11,277,967	11,497,562	63,194	45,326	158,300	2,500	175,000	135,600	39,336	.....	219,595	.....	45,927
New York	254,227	36,108,884	35,518,049	120,107	173,717	141,900	767,500	1,634,227	1,515,100	223,475	590,835	.....	.....	88,375
Philadelphia	48,884	9,465,055	9,555,143	71,300	66,541	127,200	6,700	120,414	139,400	32,699	.....	90,088	35,171	.....
Cleveland	62,916	8,849,296	8,968,745	96,756	47,273	93,500	16,900	86,000	86,000	56,282	.....	119,449	6,634	.....
Richmond	23,952	7,305,002	7,356,635	41,426	41,552	81,500	16,400	91,000	107,631	27,242	.....	51,633	13,341	.....
Atlanta	20,240	4,369,585	4,544,125	54,823	49,163	117,000	8,500	284,400	225,487	21,707	.....	174,540	.....	60,380
Chicago	128,969	16,143,586	16,243,742	60,553	86,109	157,000	54,500	163,000	142,300	131,481	.....	100,156	.....	23,212
St. Louis	20,398	6,844,304	6,799,667	16,655	37,987	29,000	45,800	57,600	76,900	33,193	44,637	.....	6,505	.....
Minneapolis	18,760	2,121,231	2,150,058	23,751	16,747	28,500	15,400	61,500	54,500	20,483	.....	28,827	.....	8,723
Kansas City	32,729	5,333,650	5,271,093	28,680	25,420	20,000	35,100	42,000	90,500	30,512	62,557	.....	50,717	.....
Dallas	12,101	3,463,299	3,479,826	18,686	18,648	21,500	24,600	52,500	39,900	19,090	.....	16,527	.....	19,589
San Francisco	33,170	4,173,437	4,070,651	39,873	27,321	68,000	49,500	261,556	391,985	29,761	102,786	.....	133,838	.....
Year: 1926	689,155	115,455,296	115,455,296	635,804	635,804	1,043,400	1,043,400	3,029,197	3,005,303	665,261	800,815	800,815	246,206	246,206
1925	679,465	108,289,466	108,289,466	Included in columns 2 and 3		908,951	908,951	1,778,958	1,788,648	689,155	513,856	513,856	308,252	308,252
1924	571,088	97,698,325	97,698,325			919,570	919,570	1,921,782	2,030,159	679,465	506,468	506,468	293,456	293,456
1923	554,362	89,614,733	89,614,733			1,039,150	1,039,150	1,764,344	1,781,070	571,088	389,239	389,239	173,899	173,899
1922	522,063	75,335,987	75,335,987			1,153,975	1,153,975	1,793,034	1,825,333	554,362	748,639	748,639	312,258	312,258
1921	357,278	64,934,801	64,934,801			3,289,081	3,289,081	2,303,221	2,468,006	522,063	1,150,002	1,150,002	391,922	391,922
1920	329,737	85,074,220	85,074,220			7,551,585	7,551,585	1,657,984	1,685,525	357,278	1,565,839	1,565,839	471,555	471,555
1919	401,926	66,053,393	66,053,393			7,930,859	7,930,859	1,871,933	1,799,744	329,737	3,526,274	3,526,274	281,385	281,385
1918	311,644	45,439,487	45,439,487			4,812,105	4,812,105	1,614,730	1,705,012	401,926	2,670,339	2,670,339	238,314	238,314
1917	169,740	24,319,060	24,319,060			2,643,846	2,643,846	1,235,739	1,377,643	311,644	2,154,721	2,154,721	272,033	272,033
1916	77,760	5,533,966	5,533,966			Included in columns 2 and 3		231,070	323,050	169,740	223,870	223,870	223,870	223,870
1915	(3)	1,052,649	1,052,649					78,040	155,800	77,760	85,697	85,697	85,697	85,697

[1] All for Government account after 1921, except $5,000,000 transferred to Dallas by New York in 1926. [2] Includes federal reserve note clearings prior to 1926. [3] Established May 20, 1915.

[Source: Report of the Federal Reserve Board, 1926, p. 117.]

691. Nature of the Reserve Agents' Fund

Willis and Steiner, in discussing the duties of the federal reserve agents, made the following comments:

So onerous did the duties thus imposed upon the Federal reserve agent especially in transfers between reserve banks, at once become, that it was deemed expedient to create a so-called Federal reserve agents' fund. The specific object in creating this fund in the first place was found in the fact that reserve agents originally had no satisfactory means of effecting settlements for notes as between themselves. The Act had been amended on September 7, 1916 so that reserve notes could be issued against gold directly deposited with the agents, as well as against commercial and agricultural paper so deposited, and this change had been maintained and extended in the General Amendatory Act of June 21, 1917. This fund consisted of deposits of gold made by Federal Reserve Agents out of the cash in their possessions with the Federal Reserve Board.—[Willis and Steiner, Federal Reserve Banking Practice, pp. 94, 614.]

The extent to which this fund has been used since 1915 is shown in the following table:

FEDERAL RESERVE AGENTS' GOLD FUND

SUMMARY OF TRANSACTIONS THROUGH THE FUND

[In thousands of dollars]

Federal Reserve Agent at—	Balance Jan. 1	Withdrawals	Deposits	Transfers to Bank	Transfers from Bank	Balance at Close of Business Dec. 31
Boston	25,000	150,000	79,000	85,000	175,000	44,000
New York	116,000	.....	.....	1,105,000	1,080,000	91,000
Philadelphia	127,389	140,000	.....	.....	109,488	96,877
Cleveland	170,000	.....	.....	50,000	10,000	130,000
Richmond	44,500	74,750	11,250	37,000	91,000	35,000
Atlanta	70,900	112,900	.....	126,400	284,400	116,000
Chicago	110,644	.....	.....	55,000	105,000	160,644
St. Louis	4,200	15,000	3,000	22,000	40,100	10,300
Minneapolis	42,000	5,000	.....	44,500	53,500	46,000
Kansas City	50,360	42,000	19,000	9,000	42,000	60,360
Dallas	6,000	7,500	.....	9,500	27,000	16,000
San Francisco	193,239	21,000	.....	255,986	241,000	157,253
Year: 1926	960,232	568,150	112,250	1,799,386	2,258,488	963,434
1925	1,307,894	559,795	126,000	975,567	1,061,700	960,232
1924	1,648,894	626,000	149,500	1,022,750	1,158,250	1,307,894
1923	1,681,098	755,000	148,500	565,704	1,140,000	1,648,894
1922	1,394,884	924,000	492,900	609,502	1,326,816	1,681,098
1921	896,692	1,589,500	1,023,854	587,372	1,651,210	1,394,884
1920	886,327	1,060,700	451,350	498,585	1,118,300	896,692
1919	928,497	1,011,370	165,000	675,440	1,479,640	886,327
1918	496,604	103,594	35,021	1,011,831	1,512,297	928,497
1917	102,580	56,590	8,820	411,087	852,881	496,604
1916	56,860	27,320	.....	21,480	94,520	102,580
1915	[1]	.....	4,400	.....	52,460	56,860

[1] Established Sept. 8, 1915.

[Source: Report of the Federal Reserve Board, 1927, p. 119.]

(a) Explain carefully just how and for what purposes this fund may be used? (b) Is it a part of the Gold Settlement Fund? (c) What is the economic importance of this fund? (d) Draw a curve showing the trend of this fund from 1915 to 1926, inclusive. (e) How do you account for the fact that there has been a decrease in the balances since 1922? Does this mean that the fund is becoming of less importance?

692. Treasury Policy in Financing the War

While there is not general agreement as to the relative advantages and disadvantages of a policy of issuing Government bonds at a rate substantially equivalent to the market rate compared with a policy of issuing Government bonds at a rate somewhat below the market, the considerations in favor of the first policy may be thus stated: First, the high rate of interest would encourage saving on the part of the public in order to obtain the advantage of the rate; second, it would result in a transfer of existing capital from non-essential and low-rate investments to Government bonds; third, it would absorb free capital and discourage non-essential production, limit expansion and inflation and reduce consumption, all of which would have the tendency to retard the rise of prices—lower prices would reduce the amount of money required by the Government in the prosecution of the war, and consequently the amount which it would have to borrow—and fourth, the high rate would have tended to maintain the price of bonds at par.

On the other hand, it could be urged in favor of the low-rate policy that the Treasury was obligated to secure the funds necessary to the prosecution of the war, at the lowest possible rate, but this reason would be sound only if it required the same amount of money to finance the war at a high rate of interest as it would at a low rate of interest.

It was necessary also for those who were responsible for the policy adopted to bear in mind that any policy adopted should be designed to avoid too sudden changes in rates which are likely to result in rapid changes in the general interest rates applicable to loans, with resulting dislocation and embarrassment to industry.

The commission is of the opinion that the lower rate of interest was more than offset by the inflation which it occasioned and the attendant high prices which accompanied the inflation. That is to say, from the standpoint of Government finance alone the total expenditure for interest and principal for the conduct of the war was probably larger as the result of the adoption of the low-rate policy than it would have been had the high-rate policy been adopted. Investors who bought the bonds from patriotic motives suffered both on account of the low rate and the depreciation of the market value of the bonds which it occasioned and the whole country from the increased total aggregate of the cost of the war, which the public must eventually pay.

If it is to be assumed that the cost of the war was not or could not have been paid from current savings or increased production, it is evident that the remainder of the cost must be paid, in the first place, by inflation of credit, i.e., by the manufacture of credit. The advantage or disadvantage, therefore, of the market or low-rate policies is measured by the inflation required under the one policy or the other. It is the

opinion of the commission that this inflation required under the lower-rate policy was measurably greater than the inflation which would have been required under the high-rate policy.—[Report Joint Commission Agricultural Inquiry, Part II, pp. 80-81, 1921.]

(a) Was the Treasury policy correct, viewed either for a short or for a long period of time? (b) How would low interest rates cause inflation? (c) Would a high tax rate cause inflation? Why? (d) Do banks manufacture credit? (e) Explain how the Commission thought this manufacturing process took place.

693. Federal Reserve Loans and War Paper

As a result of the topsy-turvy conditions created during the war, it is, however, reasonably to be believed that a percentage of the so-called war paper has in fact been given for business purposes and should therefore be regarded as abnormal in nothing except form. If, for example, A. is a borrower at a bank who stands possessed of $500,000 of Government bonds and finds that he can borrow more cheaply at Federal Reserve banks by offering straight single-name paper collateraled by such bonds than he can by discounting the paper growing out of his operations, he will under ordinary circumstances prefer to borrow by offering the single-name note collateraled by Government bonds. Despite the changes in rates of discount that have been made from time to time in the Federal Reserve system, it still remains true that a differential exists in favor of war paper, and this prevents us from knowing exactly what proportion of the actual holding of the Federal Reserve system consists of paper whose purpose is of such a nature that by the original or peace-time terms of the Act it would never have made its appearance in the bank portfolios at all. It is, however, a factor which must be reckoned with.—[Willis, Inflation and High Prices, Proceeding Academy Political Science, Vol. IX, p. 47, New York, June 1920.]

(a) On what conditions may a member bank borrow from a federal reserve bank? Is this different in any way from conditions during the war? If so, specify. (b) In what way was the differential on war paper made effective? (c) Did this differential tend to increase business borrowing with government securities used as collateral? (d) How did this method of financing influence prices in general? (e) The method of discounting war paper secured by government bonds tended to make the federal reserve notes like the national bank notes: how?

694. Selling Liberty Bonds

Now if the Government had placed its bonds at an interest rate which would have kept them at par, kept them in circulation and in the hands of the community, they would not have been in the banks: the banks could have supplied your needs, and the price level would not have risen to so great an extent.

Instead what did the Government do? It spent millions of dollars in this propaganda work, employed people and paid their expenses all over the country, to boom the government bonds, a thing which would be a reflection upon the credit of any individual or any corporation; but that method was followed for every bonded issue offered the public. When the Treasury Department was organizing those booms for succeeding bond issues, they went into the market to Wall Street, and bought bonds to sustain the price, marked them up, did just as brokers do and bankers do down there, which people criticise so much, and they have kept that up until just recently Secretary Houston announced the discontinuance of that policy. How much money do you suppose they spent in that way? They bought $1,839,000,000 of their funded debt which had been sold to the public, paid for the same with these revolving certificates of indebtedness, running from four to six months, which are placed with the banks at frequent intervals. Is that good business? Is that good banking? Was that necessary?—[Hepburn, Inflation and High Prices, Proceedings Academy Political Science, Vol. IX, p. 58, New York, June 1920.]

(a) How does the interest rate on bonds affect their market price? (b) In general terms how high would the Treasury Department have raised the interest rate in order to have kept the market price of Liberty bonds at par? (c) Do you agree with the criticism expressed in the quotation above? Explain. (d) What were the advantages to be gained to the Treasury in manipulating the market for Liberty bonds just before bringing out new issues?

695. Fiscal Operations of a Federal Reserve Bank—Sale of U. S. Certificates of Indebtedness

Accompanying a circular issued by the Federal Reserve Bank of Minneapolis to its member banks and announcing the issue of Series TS-1927 Certificates of Indebtedness, was a subscription blank whereby a member bank might subscribe for itself and its customers. Parts of this subscription blank are reproduced on the following page.

(a) Explain the four systems of payment indicated. (b) Explain the four dispositions named for the certificates. (c) What is the purpose of the "Classification of Subscriptions Received"? (d) Does the federal reserve bank receive pay from the government for its fiscal agency services?

SUBSCRIPTION

CERTIFICATES OF INDEBTEDNESS, SERIES TS-1927, DUE SEPT. 15, 1927

.....1926
(City and State) (Date)

Federal Reserve Bank of Minneapolis
Fiscal Agent of the United States,
Minneapolis, Minn.

Gentlemen:

In accordance with the terms of Treasury Department Circular No. 373, the undersigned hereby subscribes for United States 3¼% Treasury Certificates of Indebtedness as follows:

Dated Dec. 15, 1926, Due Sept. 15, 1927, Series TS-1927 PAR VALUE $.....
and encloses payment therefor together with.....ACCRUED INTEREST $.....
Days
TOTAL $.....

METHOD OF PAYMENT

1. BY CREDIT IN "Treasury Certificate Deposit Account, Series TS-1927" Due Sept. 15, 1927. $.....
2. BY DRAFT ON (Cashiers' Checks / Not Acceptable) ..... $.....
Correspondent City State
3. CHARGE OUR RESERVE ACCOUNT..... $.....
4. By Treasury Certificates of Indebtedness, Series TD-1926, Due Dec. 15, 1926... $.....

TOTAL .....

Please be governed by the following instructions:
Dispose of the Certificates as follows: Issue Certificates as follows:

Deliver to Custodian for:		Pieces		DO NOT USE THIS SPACE
		..... @ $500	$.....	.....
Safekeeping	$.....	 1,000	.....	.....
Discount Department	$.....	 5,000	.....	.....
		 10,000	.....	.....
Treas. Cert. Deposit Acct.	$.....	 100,000	.....	.....
Mail to us	$.....	Total Par Value...	$.....	

Name of Bank

Authorized Officer's signature

CLASSIFICATION OF SUBSCRIPTIONS RECEIVED

(It is Absolutely Necessary That This Information be Given)

Number of Subscriptions	Classification	Aggregate Amounts
.....	$100 to $1,000	$.....
.....	$1,100 to $10,000	.....
.....	$10,100 to $50,000	.....
.....	$50,100 to $100,000	.....
.....	$100,100 to $500,000	.....
.....	$500,100 to $1,000,000	.....
.....	Over $1,000,000 (List each separately)	.....
.....	.....	.....
.....	.....	.....
.....	Total Subscriptions.....	$.....

696. Relation of Eligible State Banks and Actual Membership of State Banks in the Federal Reserve System

	Per Cent of Eligible State Banks in the System	Per Cent of All Eligible Banking Resources Held by the System	Per Cent of Eligible State Banking Resources in the System
On the basis of the original eligibility requirements:			
June 30, 1922	17.0	77.9	55.5
June 30, 1924	16.3	77.4	55.8
On the basis of the amendments of 1923:			
June 30, 1924	10.4	75.5	53.3

On June 30, 1922, of all state banks and trust companies, 7.44% were members; on June 30, 1926, only 7.05% were members.

(a) What changes in eligibility rules were made in 1923? (b) Did the amendment result in a larger percentage of eligible members becoming actual members? (c) What are some of the proposed changes of eligibility urged in some quarters for popularizing the federal reserve among the state banks? Criticize them.

697. Definition of Eligible Paper

Section 13 of the Federal reserve act relative to the rediscount limitation upon the Federal reserve banks should be changed to conform to the exceptions provided in section 5200, Revised Statutes of the United States. The existing law provides that no Federal reserve bank may rediscount paper for a bank bearing the signature of any one borrower to an amount in excess of 10% of the capital and surplus of the bank presenting the paper. Only one exception is made to this limitation and that is in favor of bills of exchange drawn in good faith against actual existing values. If the paper is sound and safe enough to be exempt from the 10% limitation of section 5200 for the purposes of the national banks, it is safe enough and sufficiently liquid in form to be accepted for rediscount by the Federal reserve banks. It should be borne in mind that, so far as the Federal reserve banks are concerned, this is a privilege which is optional and not compulsory upon them, the same as with any rediscounts. At the present time there is a considerable amount of commercial paper and notes secured by Government bonds and commodity paper of the class and nature handled by the Federal reserve banks that is excluded on account of the 10% limitation. This debars the Federal reserve banks from rendering a complete service to the community and to the member banks, which would be profitable to the Federal reserve banks as well as helpful to the country at large. This paper arises out of the various steps of production, transportation, and distribution of goods. A considerable quantity of agricultural, cattle, and other paper that this would make available for rediscount would be of precisely the same nature as that already handled and would be equally safe and equally liquid.—[Report of the Comptroller of the Currency, 1924, pp. 9-10.]

(a) What is the historical reason for the discrimination against the federal reserve bank cited above? (b) Is the above recommendation wise and expedient?

698. Open Market Operations in Bankers' Acceptances by Open Market Investment Committee for Federal Reserve System

(000 omitted)

	Bankers' Acceptances			1926 June 2–9	
	Holdings June 2	Purchased Own Market	Received by Allotment	Maturities and Sales	Holdings June 9
	$	$	$	$	$
Boston	13,902	7,314 retained	0	9,080*	12,136
New York	26,350	10,165 "	0	7,091†	29,424
		17,046 allotted			
Philadelphia	9,780	4,675 retained	0	1,347	13,108
Cleveland	22,902	450 "	913	1,921	22,344
Richmond	9,927	320 "	1,976	1,050	11,173
Atlanta	22,361	3,331 "	2,103	3,241	24,554
Chicago	24,725	2,586 "	4,071	1,788	29,594
St. Louis	4,645	0	413	71	4,987
Minneapolis	12,441	0	1,818	2,437	11,822
Kansas City	11,489	0	2,124	988	12,625
Dallas	9,969	213 "	1,819	1,209	10,792
San Francisco	18,222	783 "	1,809	3,164	17,650
Total	186,713	46,883	17,046	33,387	200,209

* Includes $8,001,000 sold to Federal Reserve Bank of New York for redistribution.
† Includes $3,328,000 sold to Federal Reserve Bank of Atlanta from portfolio.

(a) What is the "Open Market Investment Committee of the Federal Reserve System"? who are members of this Committee? When was it first formed? (b) What is meant by "purchased own market," "retained," "allotted"? (c) Which banks did not receive acceptances by allotment? which did not buy on their own market? Is this the situation every week, or was it simply the case during the week June 2 to 9, 1926?

699. Classes of Paper Eligible for Rediscount

Make a careful study of the Federal Reserve Act and the rules and regulations of the Federal Reserve Board regarding eligibility and determine which of the following may be rediscounted by federal reserve banks:

(a) John Smith, a farmer, bought 100 bales of cotton which he later sold to a merchant, taking his promissory note for

120 days. Smith then applied to have this note discounted in order to secure funds to market his own cotton crop.

(b) A 6 months' note of $500 given by a farmer to a fertilizer company for fertilizer which was being used on his farm for growing tobacco.

(c) A bill drawn on a farmer by an agricultural implement company to cover agricultural implements purchased by the farmer. The bill was drawn payable 4 months after sight.

(d) A loan made by a member bank to a farmer to produce a cotton crop. The loan was secured by a mortgage on the farmer's land.

(e) A farmer's note for $2,500 given by a farmer for the purpose of securing funds with which to erect barns and other buildings on his farm.

(f) A farmer's note given to an irrigation company for water which was used in producing his grain crop. What would be the maximum period? Would the same rules apply to the note of the irrigation company? Explain.

700. Rediscounting with the Federal Reserve Bank

On December 1, 1923, the X National Bank of New York found it necessary not only to restore its reserve, which had fallen below the legal limit, but in addition to increase it in order to advance supplementary loans to its customers. To accomplish this, it was decided to rediscount certain of its commercial paper with the Federal Reserve Bank of New York. Let us assume that the X Bank selected from its portfolio the following and offered them for rediscount at the Reserve Bank. State which are eligible for rediscount and give the reason in each case.

(a) A note for $6,000, due in 9 months, proceeds of which had been originally used to finance the fattening of cattle.

(b) A note for $1,500 due in 4 months, the proceeds of which had been used for carrying bonds.

(c) A 90-day note for $2,000, the proceeds of which had been used in marketing cotton.

(d) The 90-day note of a waterworks company, the proceeds of which had been used to provide funds for payroll and the purchase of coal.

(e) A farmer's note for 60 days, the proceeds of which are to be used for draining land already in use.

(f) The note of an acceptance house or broker for 90 days,

secured by acceptances eligible for rediscount at a federal reserve bank.

(g) A 60-day note of a furnace company, secured by pig iron manufactured by company and on contract for delivery.

(h) Four months' paper, secured by eggs and poultry, carried in cold storage on negotiable warehouse receipts.

701. Limitations on Rediscounting Recommended

If the law had placed a wise and proper limitation upon the extent of these rediscounts, very few national banks, in my judgment, would have failed or even been gravely embarrassed. On the basis of actual experience with the national banks during this period, I believe that if they were limited in their rediscounting operations in some ratio to the capital and surplus, it would be a wise insurance against undue inflation, and a further guaranty of the security of the banks. So long as it is possible for banks to exercise an unlimited privilege of rediscounting their eligible paper, there will always be a temptation to embark on an inflation spree that is extremely liable to bring about the embarrassment, and perhaps ruin, of the institution. In view of recent acute experiences, I strongly urge that a modification and definite limitation, such as I have suggested, should have the earnest consideration of the Congress.

With one exception, the Federal reserve banks require collateral from banks rediscounting eligible paper. This requirement tends to take a too large proportion of the best paper out of the rediscounting bank. This has at times left the rediscounting institution in a difficult position if called upon to face extraordinary demands from depositors, because the bank finds itself without sufficient desirable paper to sell, to rediscount, or to offer as collateral for cash needed to meet the demands of depositors.

The one Federal reserve bank which does not require collateral from rediscounting banks insists that each rediscount operation shall stand on its own bottom. Under this method rediscounting banks offer nothing but gilt-edge paper, thus insuring careful and conservative operations on their part. This seems to me to be the plain intent and purpose of the law, and I believe the method of making rediscounts ought to be so clearly defined as to constitute an additional measure of safety.—[Report of the Comptroller of the Currency, 1921, p. 3.]

(a) Why is the ratio of rediscounts to capital and surplus suggested as a good basis of restriction on the rediscount privilege? Would the ratio of rediscounts to cash serve as well? (b) Is the above argument that rediscounting weakens the rediscounting bank sound? Was not the conception of the Federal Reserve System that the privilege of rediscounting strengthened the position of the member banks? (c) If rediscounts were restricted to some multiple of the capital and surplus, would the Comptroller's objection to the federal reserve bank's requiring collateral paper be obviated?

702. Rediscounts as Contingent Liabilities

Since September 12, 1916, it has been the policy to show rediscounts as contingent liabilities. This practice was followed notwithstanding that

the Supreme Court of the United States, in the case of *Cochran v. United States* (157 U. S., 286), held that—"The 'liabilities' of a national bank, which are required by Revised Statutes section 5211, to be stated in the reports of the Comptroller of the Currency, include contingent as well as absolute liabilities; and hence an unmatured note, payment of which at maturity is guaranteed by the bank, should be included in the list of liabilities."

Hereafter national banks will be required to include rediscounts in their aggregate resources and liabilities in reports of condition.—[Report of the Comptroller of the Currency, 1921, p. 4.]

(a) Look up a report of a national bank before and after this change in form of report and compare them. (b) Is the change at all important?

703. Acceptance Policy of Federal Reserve System

In pursuance of their policy of encouraging the acceptance market, the reserve banks have stood ready at all times to purchase such eligible bills as were offered to them at rates established by the reserve banks. It is because of this policy of the reserve banks to purchase at their buying rates all offerings of eligible bills that reserve bank holdings of bills in their effect upon the credit situation are similar in character to discounts, since they represent for the most part the application of member banks for reserve bank funds. It is, furthermore, the practice of the reserve banks never to sell purchased acceptances, but to carry them, like rediscounted paper, to maturity. This is in contrast to purchases and sales of United States securities, which are undertaken at the initiative of the reserve banks in the light of the general credit situation at a rate fixed in the market.

The extent of the development of the acceptance market since the establishment of the system is indicated by the fact that total acceptances outstanding at the end of 1925 were approximately $775,000,000. In general the acceptance has found an increasing use in the financing of foreign trade, and the volume of bills outstanding generally fluctuates from season to season and from year to year with changes in the volume of foreign trade. Of the acceptances purchased by the reserve banks during 1925, 37% represented imports, 31% exports, and 20% paper financing the domestic shipment or storage of goods.—[Annual Report Federal Reserve Board, 1925, p. 8.]

(a) What do you understand by eligible bills? (b) Is the policy of buying and holding all bankers' acceptances offered to the federal reserve banks by member banks a good one? (c) Is such a policy designed to have a more wholesome effect than if the federal reserve banks stood ready to sell these acceptances when the interest rates were falling? (d) Should the federal reserve bank policy of buying and selling government securities differ from that regarding acceptances?

704. Federal Reserve Banks and the Acceptance Market

Purchases of acceptances by the reserve banks in the open market are essentially of a different character from dealings in Government secur-

ities, and in the influences that give rise to them they are in many respects similar to discount operations. In contrast to operations in Government securities, where the initiative of purchase or sale is taken by the reserve banks, sales of acceptances to the system are made largely on the initiative of member banks and dealers. Though of recent origin in this country, the acceptance has a long history abroad, where it is the primary instrument in the financing of foreign trade and, as an easily negotiable commercial instrument of prime security, furnishes employment for short-time banking funds. Prior to the establishment of the reserve system, the absence of such a market for bills in the United States was a factor in causing a large part of American foreign trade to be financed in London, where there was a well-organized bill market.

Legal provisions and board regulations relating to the purchase of acceptances by the reserve banks are broad in character. The reserve banks have authority to buy indorsed bills arising out of import or export transactions, and out of the domestic shipment or storage of readily marketable staple commodities, and also to buy bills created for the purpose of furnishing dollar exchange abroad. In maturity, bills to be eligible for purchase by the reserve banks must have not more than 90 days to run unless they arise out of the marketing of agricultural products or out of foreign trade, in which case the limit of maturity is six months.—[Annual Report Federal Reserve Board, 1925, pp. 7-10.]

(a) What is an acceptance? an acceptance market? (b) How do you account for the non-use of banker's acceptance in this country prior to 1914, whereas it was used so extensively by European countries? (c) Is the difference in the policy of the federal reserve banks in regard to buying and selling bankers' acceptances as compared with that for handling government securities justified? (d) Account for the greater use of acceptances in financing foreign trade than in domestic trade. (e) Justify or criticize the practice of the federal reserve banks in holding purchased acceptances as discounted bills.

705. Open Market Operations of the Federal Reserve Banks

Section 14 of the Federal Reserve Act reads in part as follows:

Any Federal reserve bank may, *under rules and regulations prescribed by the Federal Reserve Board,* purchase and sell in the open market, at home or abroad, either from or to domestic or foreign banks, firms, corporations, or individuals, cable transfers and bankers' acceptances and bills of exchange of the kinds and maturities by this Act made eligible for rediscount, with or without the indorsement of a member bank.

Are the following classes of bills eligible for purchase in the open market by federal reserve banks?

(a) Sixty-day bills, accepted by banks, drawn against a shipment of gold bars to England.

(b) A banker's acceptance drawn for the purpose of purchasing goods secured by a bill of sale of stock in hand.

(c) A banker's acceptance accompanied at time of acceptance by shipping documents for shipment of goods within the United States.

(d) Acceptances due in 60 days covering the storage of marketable goods within the United States, provided the acceptor is secured by warehouse receipt.

(e) Sixty-day bills drawn by a bank in Buenos Aires for the purpose of furnishing dollar exchange.

(f) Ninety-day acceptances drawn by a manufacturer on and accepted by a trust company not a member of the Federal Reserve System, the proceeds of which are to be used for purchases of raw material and payment for labor where goods had not been sold and no warehouse receipt or other instruments could be furnished.

(g) Government bonds.

(h) Gold coin and bullion.

706. The Ineffective Character of Open Market Operations for Controlling the Money Market

It was at one time supposed that by the purchase or sale of securities the Reserve Banks could increase or diminish the amount of Federal Reserve credit in use at any time. In fact, I think it is no secret that some years ago a number of the reserve banks had this opinion and purchased securities for the purpose of supplementing their earnings. I think that the system generally recognizes now that any such belief was erroneous and the purchase of securities instead of adding to the earnings of the system diminishes them.

What actually occurs when the Federal Reserve Banks buy government securities is that the check with which they pay for those securities is placed in the hands of a dealer or a bank. If it goes to a dealer the check is immediately deposited in the dealer's bank. Thus some bank finds itself with Federal reserve funds and is in a position to reduce any amounts it may be borrowing from the Reserve Bank. If that member is not in debt at the Reserve Bank it may buy securities or in some other way put the funds into the market, where they shortly fall into the hands of a bank which is in debt at the Federal Reserve Bank and can use the funds to repay its borrowing.

No matter what the precise course is through which the money goes, it is a fact that historically the purchases of government securities by the Reserve Banks have been accompanied by equivalent reductions in the the amount of Federal Reserve credit extended in other ways, either in discounts or in holdings of bankers' acceptances. Conversely, if the Federal Reserve Banks sell securities these securities must be paid for by the member banks or their customers and the member banks increase their indebtedness at the Reserve Banks, or sell them additional acceptances.—[From a speech by W. R. Burgess, 1926.]

(a) Is this position consonant with the orthodox theory of the central bank devices for control of the money market? (b) Suggest statistical checks on the theory advanced.

707. Open Market Operations

Provisions of Federal Reserve Act regarding open market operations of the federal reserve banks:

Section 14.—As amended by act approved Sept. 7, 1916 (39 Stat., 752, chap. 461); act approved June 21, 1917 (40 Stat., 232, chap. 32); act approved Apr. 13, 1920 (41 Stat., 550, chap. 128); act approved Mar. 4, 1923.

Any Federal reserve bank may, under rules and regulations prescribed by the Federal Reserve Board, purchase and sell in the open market, at home or abroad, either from or to domestic or foreign banks, firms, corporations, or individuals, cable transfers and bankers' acceptances and bills of exchange of the kinds and maturities by this Act made eligible for rediscount, with or without the indorsement of a member bank.

Every Federal reserve bank shall have power:

(a) To deal in gold coin and bullion at home or abroad, to make loans thereon, exchange Federal reserve notes for gold, gold coin, or gold certificates, and to contract for loans of gold coin or bullion, giving therefor, when necessary, acceptable security, including the hypothecation of United States bonds or other securities which Federal reserve banks are authorized to hold;

(b) To buy and sell, at home or abroad, bonds and notes of the United States, and bills, notes, revenue bonds, and warrants with a maturity from date of purchase of not exceeding six months, issued in anticipation of the collection of taxes or in anticipation of the receipt of assured revenues by any State, county, district, political subdivision, or municipality in the continental United States, including irrigation, drainage and reclamation districts, such purchases to be made in accordance with rules and regulations prescribed by the Federal Reserve Board;

(c) To purchase from member banks and to sell, with or without its indorsement, bills of exchange arising out of commercial transactions, as hereinbefore defined;

(d) To establish from time to time, subject to review and determination of the Federal Reserve Board, rates of discount to be charged by the Federal reserve bank for each class of paper, which shall be fixed with a view of accommodating commerce and business;

(e) To establish accounts with other Federal reserve banks for exchange purposes and, with the consent or upon the order and direction of the Federal Reserve Board and under regulations to be prescribed by said board, to open and maintain accounts in foreign countries, appoint correspondents, and establish agencies in such countries wheresoever it may be deemed best for the purpose of purchasing, selling, and collecting bills of exchange, and to buy and sell, with or without its indorsement, through such correspondents or agencies, bills of exchange (or acceptances) arising out of actual commercial transactions which have not more than ninety days to run, exclusive of days of grace, and which bear the signature of two or more responsible parties, and, with the consent of the Federal

Reserve Board, to open and maintain banking accounts for such foreign correspondents or agencies. Whenever any such account has been opened or agency or correspondent has been appointed by a Federal reserve bank, with the consent of or under the order and direction of the Federal Reserve Board, any other Federal reserve bank may, with the consent and approval of the Federal Reserve Board, be permitted to carry on or conduct, through the Federal reserve bank opening such account or appointing such agency or correspondent, any transaction authorized by this section under rules and regulations to be prescribed by the board.

(f) To purchase and sell in the open market, either from or to domestic banks, firms, corporations, or individuals, acceptances of Federal Intermediate Credit Banks and of National Agricultural Credit Corporations, whenever the Federal Reserve Board shall declare that the public interest so requires.

The 1924 Regulations of the Federal Reserve Board provide:

The Federal Reserve Board, exercising its statutory right to regulate the purchase of bills of exchange and acceptances, prescribes that—

(*a*) Any banker's acceptance or bill of exchange which is eligible for discount under the terms of Regulation A is eligible for purchase by Federal reserve banks in the open market, with or without the indorsement of a member bank, if—

(1) It has been accepted by the drawee prior to purchase; or

(2) It is accompanied or secured by shipping documents or by warehouse, terminal, or other similar receipts conveying security title; or

(3) It bears a satisfactory bank indorsement;

(*b*) A banker's acceptance growing out of a transaction involving the importation or exportation of goods may be purchased if it has a maturity not in excess of six months, exclusive of days of grace, provided that it conforms in other respects to the applicable requirements of Regulation A; and

(*c*) A banker's acceptance growing out of a transaction involving the storage within the United States of goods actually under contract for sale and not yet delivered or paid for may be purchased, provided that the acceptor is secured by the pledge of such goods, and provided further, that the acceptance conforms in other respects to the applicable requirements of Regulation A.

The extent of the operations of the federal reserve banks under authority of this section is shown by months from 1914 to 1925 inclusive in the table on following page.

(a) Draw a chart showing the trend of open market operations from 1914 to 1925 inclusive. (b) By reference to the Annual Reports of the Federal Reserve Board [see Report 1922, p. 116; for 1923, p. 134; 1924, p. 77; 1925, p. 76; and 1926, pp. 102-3] secure data for bankers' and trade acceptances purchased in open market. Draw curves for these two items for the five years 1922-26 on the same chart. (c) Has the growth in volume of acceptances kept pace with the general changes in banking? (d) Is there a seasonal variation in the buying of bankers' acceptances? If so, at what season or seasons is it heaviest?

Data for Problem 707

Bills Bought in Open Market: Volume, by Months

[In thousands of dollars]

	January	February	March	April	May	June	July	August	September	October	November	December	Total
1926	199,202	245,483	242,686	260,514	364,484	318,368	244,287	226,240	234,255	263,286	329,564	424,957	3,353,326
1925	182,897	246,475	259,331	219,287	296,237	245,995	201,663	188,214	214,570	326,219	244,944	335,338	2,961,170
1924	231,941	289,138	197,714	148,458	83,492	52,017	60,136	57,354	113,773	275,469	301,671	360,979	2,172,142
1923	152,754	186,464	254,141	194,851	186,363	183,733	186,828	160,373	159,420	215,351	327,596	339,136	2,547,010
1922	103,910	139,022	144,352	95,724	150,607	175,493	158,758	185,208	217,053	206,617	175,378	202,566	1,954,688
1921	121,868	169,456	149,255	123,511	138,601	64,673	46,670	107,303	81,883	139,081	161,999	230,101	1,534,401
1920	302,452	300,307	303,359	247,594	274,237	285,753	219,464	259,708	257,989	281,833	231,840	253,828	3,218,364
1919	201,492	147,410	143,662	140,639	147,650	291,915	276,485	194,211	205,048	335,262	340,695	400,708	2,825,177
1918	130,620	148,275	138,996	108,516	115,914	89,580	123,574	162,796	183,132	256,705	195,698	155,733	1,809,539
1917	20,617	70,641	28,153	41,313	82,544	135,230	66,864	72,123	109,046	86,894	186,219	178,069	[1] 1,077,713
1916	9,603	12,416	22,918	18,499	21,912	42,325	36,575	28,447	37,087	40,895	48,547	66,871	386,095
1915	.....	2,666	8,356	4,018	2,865	4,701	5,986	4,656	4,548	6,340	7,919	12,790	64,845
1914	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Includes $170,072,483 of acceptances purchased from the Federal reserve banks of Boston and New York by other Federal reserve banks.

CHAPTER XXIII

THE MONEY MARKET

708. Application of Usury Laws to National Banks

Any national banking association may take, receive, reserve, and charge on any loan or discount made, or upon any note, bill of exchange, or other evidence of debt, interest at the rate allowed by the laws of the State, Territory, or district where the bank is located, and no more, except that where by the laws of any State a different rate is limited for banks of issue organized under State laws, the rate so limited shall be allowed for associations organized or existing in any such State under this Title. When no rate is fixed by the laws of the State, or Territory, or district, the bank may take, receive, reserve, or charge a rate not exceeding seven per centum, and such interest may be taken in advance, reckoning the days from which the note, bill, or other evidence of debt has to run. And the purchase, discount, or sale of a bona-fide bill of exchange, payable at another place than the place of such purchase, discount, or sale, at not more than the current rate of exchange for sight-drafts in addition to the interest, shall not be considered as taking or receiving a greater rate of interest.—[Rev. Stat. U. S., sec. 5197.]

(a) Why should the law allow the state statute to control the maximum rates to be charged by national banks? (b) The usury law of New York exempts collateral call loans above $5,000: why? (c) If state statutes expressly authorize state banks to charge more than 7%, may a national bank operating in that state charge more than 7%? (d) Where illegal interest has been knowingly stipulated for, but *not paid,* then only the sum lent, without interest, can be recovered. Where such illegal interest *has been paid,* then twice the amount so paid can be recovered in a *penal action of debt,* or suit in the nature of such action, against the offending bank, brought by the persons paying the same, or their legal representatives. Why the distinction between the two types of usurious contract? (e) Is the penalty twice the amount of interest paid or twice the excess above the legal rate? Why? (f) Where usurious interest is paid by transfer of property may the payer recover the penalty? How is an under-valuation of the property provided against as a device for evading the usury law? Do pawn shops charge usurious rates? (g) May only the party paying the illegal interest recover the penalty, or may outside third parties? (h) Is a usurious contract of debt void? Does it defeat the title of the bank to the instrument? (i) Suppose the penalties provided by the state usury law provides more or less severe penalties than the federal statute, which prevails? (j) May interest at the maximum legal rate

be compounded quarterly or more frequently and still be within the usury law? (k) In a state where no usury law exists a national bank discounts a 60-day bill at 7%, taking the interest in advance, and thereby getting really more than 7%: is this illegal?

709. Definition of Usury

Supreme Court of the United States, Evans, receiver of the Citizens & Screven County Bank *v.* National Bank of Savannah, 251 U. S. 108:

> . . . under the national banking act, which expressly empowers national banks to discount commercial paper and permits them to "take, receive, reserve, and charge on any loan or discount made . . . interest at the rate allowed by the laws of the State . . . where the bank is located, and no more," such banks in discounting short-time notes in the ordinary course of business may retain an advance charge at the highest rate allowed for interest by the State law, even though such advance taking would be usurious under the State law in the cases to which it applies. To discount, *ex vi termini* implies reservation of interest in advance.

(a) A note dated March 1, 1920, for 6 months, at 6%, for $1,000, was discounted on June 1, at 8% [the maximum rate allowed by the usury law in the state]: calculate the interest rate per annum taken by the discounting bank. Is it usurious? (b) If in the above note, the bank had required the customer to carry a 20% balance—20% of the proceeds—would the rate have been usurious? Calculate it too.

710. Term Settlements

The following quotations are given to show the method used in London in settling stock exchange transactions:

> As the principal trading in securities on European Bourses and Stock Exchanges is for the periodical or term settlement, most of their clearing systems are adapted thereto and make no provision for cash trades. The definition "term settlement" used herein indicates any settlement for a period that is weekly, fortnightly, or monthly. (p. 7.)
>
> In a market having a daily settlement as New York, the operations of a Clearing House settle on an average 60% of the actual delivery and payment of daily transactions, leaving only 40% to be actually settled for the succeeding day. These figures vary slightly according to the character of the market, but the law of averages from statistics during the twenty-seven and a half years that the Clearing House of the New York Stock Exchange has been established show that the variation is seldom more than 5% above or below the percentages given. (p. 9.)
>
> The settlement in London is fortnightly for all securities except Consols, which are settled monthly.
>
> The Settlement Department of the London Stock Exchange is under the control of a sub-committee of the Committee on General Purposes, with a Manager and subordinates numbering about thirty for the perma-

nent staff, but increased by about one hundred and forty at the time of the settlement, divided into day and night shifts.

There are two classes of settlements: one for the Mining or Registered stocks, which begins the first of the four days of settlement, and the other for Bearer or Scrip securities, which include American stocks, and begins on the second day. The number of securities in the Settlement Department in February, 1914, amounted to 243 which is a fair average. The number is increased or decreased, according to the activity of the stocks, by decision of the Settlement Department Committee, acting under suggestions from the Manager of the Department. (pp. 11-12.)

The method of the London Settlement Department carries to its extreme limit the theory of the original liability on contracts, but while it thus apparently increases the security in case of a failure, it is placing every house concerned in danger of possible breakdown of the clearing machinery, and in times of very great activity it has so fallen down.

The alternative of this system is the pro rata clearing which is followed by the Continental Bourses and by the Clearing House of the New York Stock Exchange. This system embodies the principles which should be adhered to if a term settlement is ever adopted in New York. (pp. 13-14.).—[S. F. Street, Term Settlements, American Acceptance Council, New York.]

(a) Compare this method with the New York practice. (b) What are the advantages of the "term settlement" method as compared with those of the "daily settlement"? (c) What influence, if any, would an introduction of "term settlement" have upon New York banks in financing stock exchange transactions?

711. The Flow of Funds Into and Out of the New York Money Market at U. S. Treasury Quarterly Financing Periods

GAINS AND LOSSES OF FUNDS BY THE NEW YORK MONEY MARKET
(000,000 omitted)

I. GAINS TO THE MARKET: 1926 June	12	14	15	16
1. Treasury transactions:				
Notes redeemed (net)	0	0	110	3
Interest paid	0	0	29	5
Checks and warrants cashed	2	3	3	4
Securities purchased	0	2	12	0
2. Commercial and agency transactions:				
Securities purchased for other Federals	0	7	0	0
Transfers and check settlements	1	0	54	22
Net coin and currency receipts	0	0	4	3
Operations for foreign accounts (net)	0	0	1	0
3. Reserve bank transactions:				
Acceptances bought	0	6	3	0
Acceptances, sales contracts, increase	0	13	0	0
Securities bought for system's account	0	6	1	0
Net increase in loans to N. Y. C. banks	0	0	0	0
Total gains	3	37	217	37

II. Losses by Market: 1926, June	12	14	15	16
1. Treasury transactions:				
Income taxes collected	2	3	6	78
Customs and other receipts	2	2	5	3
Foreign debt payment (cash)	0	0	4	0
2. Commercial and agency transactions:				
Transfers and check settlements	0	1	0	0
Net coin and currency payments	1	0	0	0
Operations for foreign accounts (net)	1	2	0	0
Gold exports	0	0	0	1
3. Reserve bank transactions:				
Acceptances matured	0	6	4	4
Acceptances, sales contracts, decrease	0	0	0	11
Securities sold from system's account	10	40	10	0
Net decrease in loans to N. Y. C. banks	7	6	39	8
Total losses	23	60	68	105
Net gain for day			149	
Net loss for day	20	23		68
III. Reserve Position of 23 Leading N. Y. C. Banks:				
1. Actual reserves at opening of business	595	569	537	680
2. Average reserves	604	569	558	589
3. Reserve requirements	602	599	599	603

(a) Why are the transactions grouped under three headings? (b) Explain the meaning of each item of gain or loss. (c) Distinguish "Acceptances bought" and "Acceptances, sales contracts, increased." (d) How are "Securities bought for (sold from) System's account"? (e) What is the nature of the "Operations for foreign accounts"?

712. Factors Which Determine the Call Loan Rate

Following is a list of some of the most important factors which affect the call money market. . . .

1. Local Condition of the Money Market: (a) Average rate of call money during the day. (b) Renewal rate on call loans. (c) Discount call money market.
2. Factors relating to Federal Reserve Activities: (a) Federal reserve shiftings. (b) Federal reserve bills bought in the open market. (c) Federal reserve discount rate. (d) Federal reserve volume discount. (e) Crop moving.
3. International Finance Conditions: (a) Foreign exchange rates. (b) Foreign situation. (c) Gold importation and exportation. (d) Bank of England rate.
4. Permanent Investments: (a) Course of the bond market. (b) Course of stock market—strength or weakness—volume of sales. (c) Reorganization payments. (d) Syndicate payments. (Dates ahead.)
5. Financing by Government Bodies: (a) Government financing. (Dates ahead.) (b) City and state bond issues.

6. Time Money.
7. Condition of Banks: (a) Clearing House bank statement. (b) Reserve in member banks, and Federal Reserve Bank statement.
8. Acceptance Market.
9. Prices of Commodities.—[Griffiss, The New York Call Money Market.]

(a) Show how each of these factors affects the call loan rate.

713. Control of the Call Loan Money Market

Bartow Griffiss (in "The New York Call Money Market", p. 78) gives as reasons for his belief that there is no control in the New York Call Money Market which could have any command over the demand for all loans or which could have any control of the supply of funds and hence of the rate of interest paid on such loans, the following arguments:

1. There is no limitation upon borrowers to obtain funds in any one market; there are three independent money markets and the borrower may obtain his loan in any one of them. They operate entirely independent of each other and are not organized under the control of any one body.
2. There is no control of the supply of funds which is available for call loans in the money market.
3. The renewal rate as determined by the Stock Clearing Corporation and the Governing Committee of the Stock Exchange is closely followed only in the call money market on the floor of the Stock Exchange, and even here it is not compulsory for either the lenders or the borrowers to accept this rate as determined. Furthermore, it is not closely followed by the outside money markets, because in these markets there are many individual agreements between borrowers and lenders as to what the rate shall be.

(a) What are the three markets handling call money in New York? (b) How is the renewal rate now determined by the Stock Clearing Corporation? (c) Under what conditions might a bank depart from the renewal rate as fixed by the Stock Clearing Corporation? (d) Is there any rebuttal to the above arguments?

714. Course of Renewal Rate in 1919-20

On November 10, a year ago, this brokers' committee announced that the renewal rate on call loans would be 12%. The following day, November 11, they raised it to 14%. On November 13 the rate was raised to 16%; November 14 it dropped to 14%; on November 21 it was made 8%, although other loans were made as low as 6%. On December 18 it was 6%; December 23 it was raised to 10%, on the 29th to 12%, on the 30th to 15%, and remained at that rate until January 5, when it was lowered to 10%. On January 31 the renewal rate was 12%, the next day, February 1, it was advanced to 18%, dropped to 14% on February 2, advanced to 17% on February 5, and remained at 17% until February 9, when it was reduced to 14%. On February 17 it was 6%,

raised again on February 26 to 10%, and continued at 10% until March 4, when it was reduced to 9%. On April 16 the renewal rate was again 10%. In May the highest renewal rate was 9%. In June the rate was 9% from the 25th to the 30th. July opened with a 10% renewal rate. It was lowered during the month, but returned again to 9% on the 16th, 17th, and 27th. It is gratifying to note that since the publication of the Comptroller's statement of July 31 regarding excessive interest rates the "renewal" rate does not appear to have been advanced again as high as 10%.—[Report of Comptroller of Currency, 1920, V. 1, p. 89.]

(a) Why did the rate reign so high during this period? (b) Look up the Dow-Jones estimates of the volume of call loans outstanding during this period, and make an estimate of the daily changes in the total amount of such interest paid to the New York banks and their correspondents.

715. Determination of the Renewal Rate

As a result of persistent inquiries among the banks, brokers, and stock exchange authorities, this office is now, for the first time, able to inform the public as to how the so-called "renewal" rate is made from day to day in the New York call money market, and the extent to which this money rate is observed by the New York banks in making their charges on ordinary Wall Street or brokers' loans.

Under the New York banking law, it is lawful for a lender to charge any rate of interest which may be agreed upon with the borrower on a demand loan for $5,000 or more secured by stocks, bonds, or other securities. This provision of the New York statute enables lenders to escape penalties for usury which exist in most of the other States.

From information furnished this office, through different sources, it appears that every business day a coterie of brokers, members of the New York Stock Exchange, get together for consultation on the floor of the exchange, or by telephone, and determine what, in its view, is the proper rate for the renewal of all street or brokers' call loans for that day. As soon as the rate is agreed upon the president of the stock exchange is notified, and the rate is posted on the floor of the stock exchange at, say, 11 o'clock.

This rate is then sent over the "ticker" to all the banks in New York City and these banks thereupon mark up or down, as the case may be, the rate of interest upon practically *all* their Wall Street or so-called brokers' loans. Some banks take the precaution to notify their customers by card, sent by mail or otherwise, of the change in interest rate on their loan, while other banks do not. They claim that the posting of the renewal rate on the floor of the stock exchange serves automatically to raise or lower the rate of interest on this character of loans, held by all the New York banks, for themselves or their out-of-town correspondents, and their customers are charged the rate so posted, unless they make special arrangements with the bank to the contrary, or pay the loan.—[Report of Comptroller of Currency, 1920, V. 1, p. 88.]

(a) What changes of method of determining the renewal rate have been brought about by the establishment of the Stock Clearing Cor-

poration? (b) Do all the banks follow exactly the changes in the renewal rate? (c) What is the danger of having the rate determined by a small group of experts? (d) Is the group who determine the renewal rate self-appointing? What is the basis or qualification that determines their appointment to this group?

716. Relation of Call Loan Rates and Commercial Paper Rates

It is the universal custom of the banks to satisfy first the commercial needs of their customers. They feel an obligation to customers but none to those who borrow in the open market on securities. Besides, as the resources of the banks mainly come from the commercial customers, their own self-interest compels a preference in favor of their commercial borrowers, since failure to grant them reasonable accommodation would induce them to withdraw their deposits and so reduce the ability of the banks to do business. Although the money of the banks and trust companies comprises by far the greater proportion of the money loaned on the securities market, an examination of the prevailing rates on commercial paper at times when the call-money market is particularly strained indicates that there is little causal relation between the rates for call money and those on commercial paper.—[Pierre Jay, to Federal Reserve Board, 1920.]

(a) How does a Wall Street bank classify its collateral loans and customers with respect to the obligation it feels to accommodate them? Does this indicate that the above statement fully complies with the practice of the Street? (b) The Federal Reserve Act precludes the purchase or discount by federal reserve banks of "notes, drafts, or bills covering merely investments or issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities, except bonds and notes of the Government of the United States." Is the rigid enforcement of this inhibition sufficient to divorce commercial banking [that is, of the member banks] from dependence on stock exchange collateral loans to a salutary degree? (c) In March 1920, the Senate directed the Federal Reserve Board to advise it as to what was "the cause and justification for the usurious rates of interest on collateral call loans in the financial centers." The rates had ranged between 12 and 30%. The only financial center in this country in which there is maintained a call money market of national importance is New York City: were such rates usurious in New York? Was Senator Owen right in believing that when call loan rates stood for some time at such high level, funds needed in commerce and industry would be diverted from all over the country to Wall Street for call loan purposes? (d) Would it be desirable in New York for call loans to be placed in volume on the basis of acceptances as collateral? What effort has been made to develop this practice? If it were developed

would it make the call loan rate and the discount rate on acceptances fluctuate more nearly together? (e) Is it possible for a member bank to discount at the federal reserve bank some eligible notes, drafts, or bills of exchange, and lend the proceeds on call in Wall Street on stock exchange collateral?

717. Evils of High Call Loan Rates

I will also add that there is not, and has not been, in my judgment, the least justification for the excessive and burdensome interest rates, running up to 10, 12 and 15 per cent and higher which have been exacted by some of the banks in New York City, the principal financial center of our country. New York is the only city of consequence in the world where such interest rates exist and are tolerated. They do not prevail in London or Paris, Berlin or Rome, Pekin, Hongkong or Tokio, or in any of the leading cities of our own country, San Francisco, St. Louis, Kansas City, New Orleans, Atlanta, Dallas, Chicago, Minneapolis, Cleveland, Richmond, Baltimore, Philadelphia, or Boston.

These excessive interest rates and the publicity given them have increased the uneasiness in financial circles and have been a contributing cause rather than a consequence of the upsetting of security values and of the excessive and unjust rates which corporations and others have been required to pay for money in recent months. The banks which have charged their customers these excessive rates—at times as high as 15 per cent or more—have themselves at the same time been liberally accommodated with millions of dollars by the Federal reserve banks at average rates of considerably less than 6 per cent.—[Report of Comptroller of Currency, 1920, V. 1, p. 80.]

(a) What was the record of the call loan rate during 1919 and 1920? How did the Money Committee prevent wide fluctuations during the war? (b) What conditions in the organization of the New York Money Market make wide fluctuations of the money rate a phenomenon of that market alone? (c) To whom were loans made by the New York banks at these high rates? What proportion of their loans were made at such rates? (d) Is there reason to believe that the rates drew funds from the interior of the country, and from industry and commerce, causing business distress and high commercial rates over the country? (e) Should the federal reserve banks lend or discount for the member banks that charge such high call rates?

718. Comparison of Interest Rates in the United States and Canada

. . . the following extracts from the reports of the president and of the general manager of the Bank of Montreal, one of the two largest, if not the largest bank of Canada, submitted recently at the one hundred and third annual general meeting of the shareholders of the bank, are instructive:

"As a result of the completion of a successful year's operations, due in part to the high interest rates for money that have prevailed outside

Canada, where a portion of our reserves are carried, your directors decided to declare a bonus of 2%, making the distribution to shareholders for the year 14%."

The general manager of the same bank, in his report in commenting upon the extra bonus of 2% in addition to the usual dividend, said:

"Let me make it clear that this result is not the outcome of higher rates of interest on current loans in Canada.

"The rate of interest to the merchant and manufacturer at home is about the same as it was before the war. . . .

"The volume of our call loans in New York is governed solely by our requirements in liquid reserves. We do not increase or diminish them on account of higher or lower rates, but we have been fortunate this year in that rates have averaged high. . . .

"As comparisons are constantly made between Canada and the United States owing to general similarity in conditions, one anomaly attracts special attention, viz, that with credit restriction as acute here as it is across the line, the price of money is materially lower in the Dominion.

"This condition, in days of world-wide high interest rates, has attracted much attention in other countries, and is regarded as a tribute to Canada's good banking system."—[Report of Comptroller of Currency, 1920, V. 1, p. 106.]

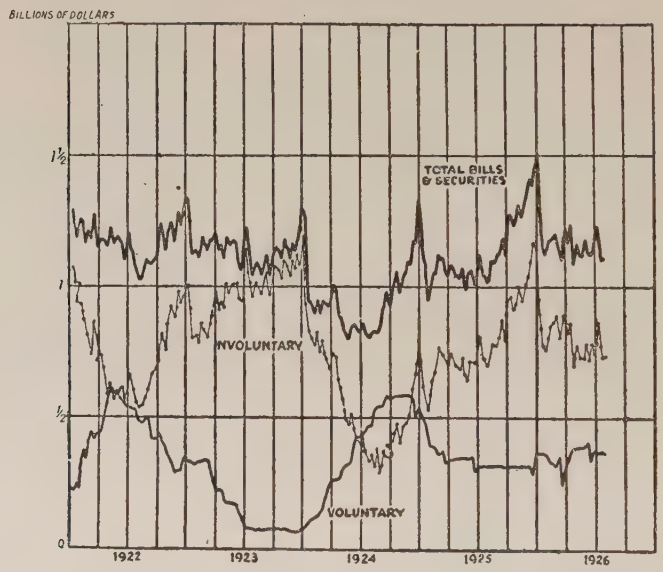
(a) What are the facts as to relative size of rates in the United States and Canada? (b) Explain the difference.

719. Balances of Interior Banks in Wall Street

Interior banks find balances with New York banks desirable for the following reasons: (1) The ease with which they can loan their money this way. (2) The fact that the call loan rate is frequently higher than the acceptance rate. (3) The greater breadth of the New York call loan market than any acceptance market in the United States. (4) The fact that banks cannot properly diversify their loans and investments. (5) The large city banks are in a better position to handle these funds than the interior banks themselves. Develop these arguments and bring out the following points:

(a) How an interior bank places its call loans and how it recovers them. (b) Are call loan rates always, or even generally, higher than those on acceptances? (c) Is there more than one acceptance market in the United States? Does each federal reserve bank constitute such a market? (d) Is there any personal ill-feeling on the side of either borrower or lender when the interior banks calls its loans? (e) The degree to which this reliance of interior bankers on call loans is due to the inertia of habit formed in pre-federal reserve days. (f) The inability of interior banks to secure desirable commercial paper has induced many banks to turn to this practice. (g) The relationship, if any, to the seasonal character of the business of interior banks.

720. Relation of Rediscounts and Open Market Operations of Federal Reserve Banks



Changes in Kinds of Federal Reserve Credit in Use

(a) Explain "voluntary" and "involuntary" credit. (b) What discount policy is here evident?

721. "Participating Loans" on Call

Stock Exchange loans are usually made in multiples of $100,000. City banks, then, in order to put out $25,000, or any fraction of the unit, make a practice of combining several sums aggregating $100,000. These are termed participating loans and frequently are contributed to by the bank itself in order to make up the round amount. The city bank's readiness to accommodate by participating in these combined loans makes it possible for their out-of-town correspondents to liquidate on any business day without exception. I lay emphasis on this because loans are neither made nor paid on Saturday and it is conceivable that inability to realize on an investment in an emergency on a Saturday might result in serious inconvenience, if it were not for the willingness of the New York bank to release its correspondents' funds by assuming their loan participations.—[Speech by Jason Westerfield, 1926.]

(a) When a Wall Street bank places loans on call for an interior correspondent, does it guarantee the loan? Does it act as agent merely, or does it place the funds as its own? Does it place these funds at as high rates, with as good security and margins, etc., as its

own funds? (b) A Wall Street bank placing $150,000 on call for an out-of-town correspondent divided the loan into thirty $5,000 participants: was this necessary to procure safety? to comply with the law?

722. Position of Brokers as to High Call Loan Rates

Some surprise has been occasioned by the omission of stock exchange houses to protest more vigorously against the imposition of excessive interest rates by banks in New York City; but their silence may be better understood when we consider that it is not the brokers who have ultimately to pay the heavy rates, but their customers and clients for whom they are carrying securities.

Furthermore, it is conceivable that the brokers themselves may profit by these high rates, automatically fixed by the stock exchange "coterie," on brokers' loans, for it is understood that the brokerage houses generally, if not always, charge their customers, for the use of the capital of the brokerage firms employed in carrying stocks, the same rates, or the average rates, which they have to pay the banks from whom they borrow.

In other instances the brokerage houses profit from these high rates when stocks are sold short and when the borrowing rate on stocks is less than the rates which the brokers receive by lending the proceeds of the stocks which they sell short.

These two considerations go far to explain the forbearance displayed by the brokers for excessive rates charged by the banks on brokers' loans, although high rates naturally have a tendency to curtail the volume of their business.—[Report of Comptroller of Currency, 1920, V. 1, p. 106.]

(a) In a purchase of a security for a customer what is the occasion for a broker borrowing money? What collateral does he give for his loan? (b) In a short sale of a security what occasion is there for a broker borrowing money? What is meant by "loaning flat," or loaning at a "premium," and under what conditions would this arise? (c) Do low interest rates cheapen the cost of speculation and therefore tend to increase its volume? Does it increase the volume of loans to bulls or bears the more? What effects is low interest cost likely to have on the stock market?

723. Method of Clearing and Settling Security Contracts on the Stock Exchange

In 1919 the American Acceptance Council voted as follows:

Whereas, The present method of daily stock exchange settlements, with its dominating and often unsettling effect on the call money market, influences adversely the development of a wide and healthy discount market in the United States;

Resolved, That the Chairman of the Executive Committee be authorized to appoint a committee consisting of members of the Executive Committee and other individuals to study the advisability, ways and means of modify-

ing the present system of settlements on the New York Stock Exchange and substituting therefor some system of periodical settlement, with power to take such steps as may seem advisable in the case.

This committee reported, in part, as follows:

The members of the Committee have unanimously expressed the opinion that the adoption of a term settlement by the Exchange would offer advantages in that it would eliminate duplication of the handling of securities and in payments. Inasmuch as it involves, however, changes of great importance both to the banks and to members of the Exchange, it will require the most careful study of the subject by the Committee and in any case a term settlement cannot be put in operation until the new system of daily Stock Exchange settlements through the Stock Clearing Corporation has been perfected and in practical operation for a reasonable time.

(a) What system of clearing was employed before April 26, 1920? "Notwithstanding the accomplishment of the Clearing House, the volume of balances to be settled plus the settlement of non-cleared stocks and bonds required such an amount of bank credit and certification from the New York banks both in money value and checks necessary to be drawn and certified that in 1913 the banks of New York insisted that the New York Stock Exchange endeavor to find ways and means to further relieve them of the credit extension and work involved." Explain. (b) As a result of this investigation the Stock Clearing Corporation was established on April 26, 1920, and made a part of the facilities of the Exchange. Outline its methods, pointing out how it remedies the evils it was designed to correct. What is the Night Clearing Branch? The Day Branch is a settlement department; explain. (c) Is the Stock Clearing Corporation a bank? Where are the funds represented by its capital, surplus and clearing fund carried? (d) It is said that "in transactions which, before the creation of the old Clearing House, would have required $100,000,000 to effect the settlements, and, under the operations of the Clearing House, would have required only $50,000,000 now, under the operations of the Stock Clearing Corporation, require only about $20,000,000." Show just how this economy is achieved. (e) "On one day, the Stock Clearing Corporation settled the day's transaction by the use of only 340 checks which, if it had not been in operation, would have required the drawing and certifying of 19,775 checks." Show how this economy of effort is achieved. (f) How does the Stock Clearing Corporation clear loans? (g) How does the Stock Clearing Corporation clear contracts? (h) The Day Branch also settles transactions in bonds and non-cleared stocks: explain and give methods. (i) What is the function of the Stock Transfer

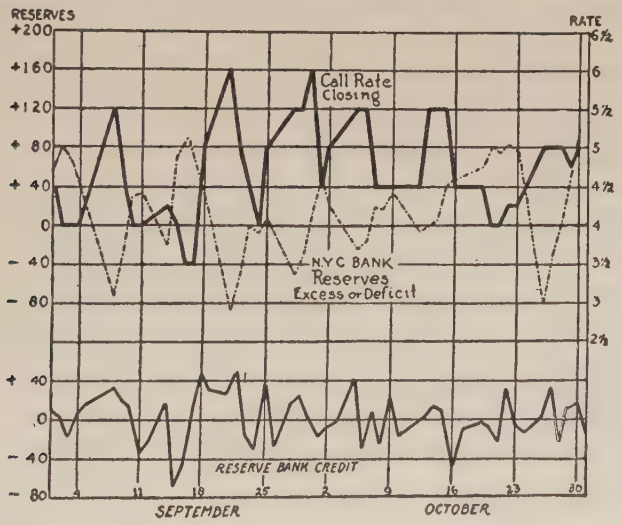
Department? (j) How are the expenses of the Stock Clearing Corporation met?

724. Relation of the Money Market to Business Condition

In October, 1920, time loans and merchants paper ruled at 8%, and the reserve ratio of the Federal reserve banks had fallen to 43%. Last week the open market loaning rates ranged around 5 and 5½%, with a downward tendency, and Thursday's statement showed a Federal reserve ratio of 76⅞%, with an upward trend. Calculated in the old fashioned way, there was practically no surplus over required reserves in October, 1920; the surplus last week was $1,734,000,000.

(a) Does this contrast of 1924 over 1920 prove that "neither easy money nor a large surplus of bank reserves will of itself create a trade boom"? What else is necessary? (b) In what period of a business cycle are there easy money and surplus reserves? Why does not business boom at such time?

725. Relation of Federal Reserve Bank to Call Loan Market



Bank Reserves and Call Loan Rates, and Credit Advances of the Federal Reserve Bank of New York

(a) State the relations evident in the chart, among the three items.

726. The "Money Committee"

From September 1917 to January 1919, the New York Call money market was under the supervision and control of the Money Committee, which was itself a sub-committee of the Liberty Loan Committee formed

shortly after the United States entered the war. The Money Committee was definitely organized as a sub-committee in September 1917, with Benjamin Strong, Governor of the New York Federal Reserve Bank, as chairman and the following men as members: James S. Alexander, George F. Baker, Walter E. Frew, Bates W. McCenah, Charles H. Sabin, Frank W. Vanderlip, James N. Wallace and Albert H. Wiggin. The reason for the formation of this committee was that when the Liberty Loan Committee was organized in April 1917, one of the first developments which was encountered was the tendency on the part of lenders—both New York City banks and out-of-town banks—to withdraw their loans from the Stock Exchange in order to invest in the new issues of securities being made by the Government. A further reason why the banks wished to withdraw their funds from the Stock Exchange was that they felt that they would have to increase greatly their borrowings from the Federal Reserve banks, and so they wished to change these loans for other kinds of investments which would be available for rediscount at the Federal reserve banks.—[Griffiss, New York Call Money Market, p. 32.]

(a) The Committee assembled a fund from the eight banks they represented to take care of any deficiencies as a result of the calling of loans by banks of New York or out-of-town: show how this fund tended to stabilize the call loan rate. How did it facilitate the government policy of financing the war at low rates? How big was the pooled fund? (b) The contributions to the fund were later assessed upon the banks in proportion to their normal loans on the Stock Exchange: what was the reason for this apportionment? The total number of contributors rose to 65: the fund to $400,000,000: how did these increases make the system more effective? (c) The demand side of the market was controlled by not permitting a bank to increase its borrowings beyond the amount it reached on the day when the apportionment of contributions was determined; by requiring larger margins of collateral against call loans, by encouraging the banks to run their time loans for shorter periods. Explain how each of these regulations accomplished the desired end. (d) The Money Committee relinquished its control January 10, 1919: compare the call rate fluctuations for the period 1917-18, and the period 1919-20. Does the comparison show the usefulness of the Committee?

727. Call Money Rates in 1920

The following questions are based on the Report of the Comptroller of the Currency, 1920, pp. 79-107, covering his investigation of the practices of the call loan market for money in New York. The student is respectfully referred to these pages for information answering the questions:

(a) What was the range of call loan rates in 1920? (b) Were the high rates the cause of the fall in the securities market or was the tightness of the money market the result of falling security prices?

(c) What was Senator Owen's objection to the high call loan rates? Was he supported by the Comptroller of the Currency in his charges? (d) Did all the banks automatically mark up or down the rate for renewed loans according to the official renewal rate posted on the Exchange? (e) Were discriminations shown among borrowers on renewed loans as to rate charged? Was the discrimination based on whether the borrower was a depositor? (f) How many persons helped fix the renewal rate? who were they? What is the danger in the system of having the rate fixed by a small group of interested men? (g) When a Wall Street bank placed loans on call for a correspondent did it take a commission, did it split the excess above the renewal rate, or was the loan placed on a gratuitous basis in the light of the balance carried in account? (h) Was it possible for a bank to borrow from the federal reserve bank at, say, 6% and lend on call at, say, 20%? was this expedient? (i) Would it be well to fix the maximum differential between the local discount rate and the federal bank discount rate?

728. Average Interest Cost

My accountant has testified that the proper method of arriving at the average *interest rate cost to a borrower* on notes *discounted,* all running for less than a year, is to bring said notes to an average amount for a year, deduct from such amount the total amount of discount and then divide the remainder into the total amount of discount paid. The opposing accountant has testified that the proper method is to reduce said notes to year basis and divide such an amount directly into amount of discount paid. His method, I claim, shows the average rate of discount paid, but not the average *interest* rate cost to borrower.

(a) Which accountant is right, if either? (b) Illustrate the case by taking three notes, as follows: (1) For $1,000 drawn December 1, 1925, for 4 months, with interest at 6%, and discounted January 15 at 5%. (2) For $1,000 drawn February 10 for 90 days, without interest, and discounted at 4.5% April 1. (3) For $1,000 drawn February 27 for 6 months, with interest 4%, discounted at 5.5% on March 15. What was the average rate of interest paid to the discounting bank by this customer who discounted his notes thus?

729. Time Factor in Interest Rates

If the interest for a certain number of odd days has been computed on a 360-day basis, a change may readily be made to a 365-day basis by subtracting from such interest 1/73 of itself. On the other hand, if the interest for an odd number of days has been ascertained on a 365-day basis, the addition of 1/72 of itself to this amount will give the interest on a 360-day basis.

(a) Explain the mathematics of this rule. (b) Look up New York Statutory Construction Law (Laws of 1892, Chapter 677, sec. 25) the meaning of "half-year" and "quarter-year." Does this statute specify a 360-day year or a 365-day year for interest computations?

730. Interest on Deposits of National Banks

Many of the accounts of country banks and out-of-town correspondents would be transferred to the trust companies, State banks, and private bankers who are not members of the (New York Clearing House) association, and who would not be bound by its regulations, and for this and other reasons it seems very difficult to bring about an absolute cessation of the practice. Until all the bankers in the principal cities of the country agree to discontinue the payment of interest it is probable that it will continue to be paid upon current accounts.

It has been held by the courts that the conferring of special powers upon national banking associations prohibited them from the exercise of certain other powers not specifically conferred, and the decisions of the United States courts seem to indicate that it is unlawful for a national bank to borrow money to lend again or to receive deposits payable at fixed future dates with interest thereon.

Notwithstanding the fact that it has been held that national banks could not receive deposits payable otherwise than on demand, it is possible that, in view of the fact that the custom of purchasing deposits by the payment of interest is so universal, the courts might hold that national banks would have the same rights as other bankers to receive deposits subject to repayment upon a notice of from five to thirty days, and if this should be the case it is submitted that they should pay interest only upon deposits of this character, for there can be no doubt that it is extremely injudicious to receive current accounts payable *on demand* subject to interest. It woud appear that if this course was adopted two classes of account would have to be maintained with most of the country correspondents of national banks in reserve cities, as it would be impracticable for a national bank in the interior to have any portion of its reserve deposited in such a manner that it could not be drawn upon demand.—[Report of the Comptroller of the Currency, 1884, p. LVIII.]

(a) Exactly what was the position of the courts on the receipt of time deposits and the payment of interest thereon by national banks? What were some of the notable cases on this point? (b) In what ways was this legal prohibition evaded or obviated by the national banks? (c) Is it proper to speak of the payment of interest on deposits as the "purchase of deposits"? Is the receipt of deposits borrowing by the bank? In answering this question does it make any difference whether the deposits are made payable on demand or only after a certain time? May a bank borrow and lend by use of certificates of deposit? (d) Is it now "unlawful for a national bank to borrow money to lend again or to receive deposits payable at

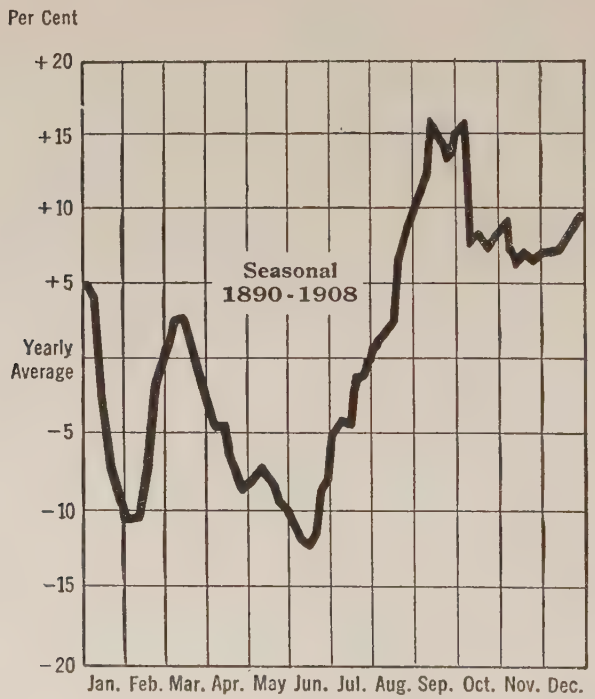
fixed dates with interest thereon"? (e) Under the Federal Reserve Act, as amended, deposits were divided into time and demand deposits and a different minimum reserve required against each: is the reserve against demand deposits payable by the federal reserve bank on demand, and that against time deposits payable after a certain number of days?

731. Interest on Bank Balances

There is "a practice prevailing more or less in the banks of the principal cities, of paying interest on the balances of country banks. . . . Country banks keep deposits with city banks for the purpose of facilitating exchanges in carrying on their business; and ordinarily it is presumed that they find a profit in doing such business, and in keeping a working balance in the city banks. . . . The payment of interest on such balances attracts all the spare capital from the country to the commercial centers, while it is still payable at call. This capital would not remain dead or unemployed, but is drawn away from the country where it is needed, to business centers where the rate of interest is higher. The cities then come into competition with the country, and compel borrowers in the country to pay higher rates."—[Annual Report of the Comptroller of the Currency, 1867, p. VIII.]

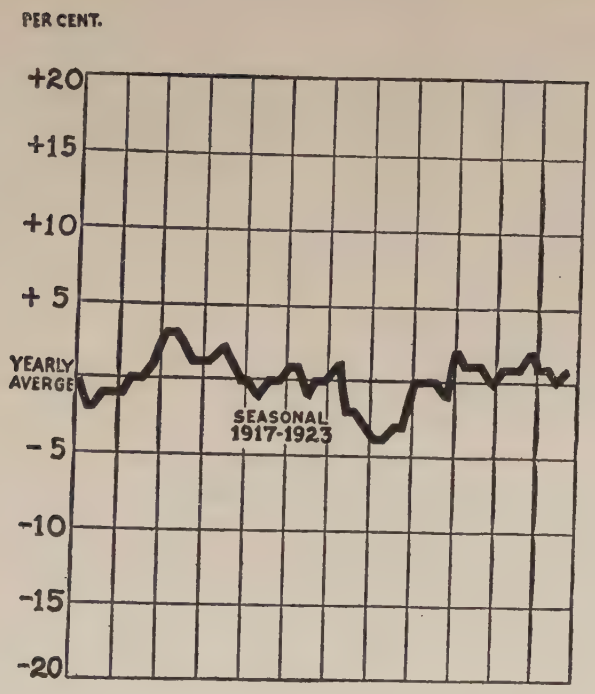
(a) Does this early quotation indicate that the system of concentrating reserve balances in financial centers was caused by the establishment of the national bank system? (b) Is the system of country banks keeping a working balance in financial center banks justifiable? (c) Is it generally true that the rate of interest prevailing in the financial centers is higher than it is in the country bank districts? Is the rate of interest which the financial center banks pay on the balances of country banks higher than the rate of interest prevailing in the country bank districts? Why then are these balances carried in the financial centers, beyond their needs for sale of domestic exchange? (d) Is it bad economics to have city compete against country for the spare balances? Is it good banking for country banks to carry in financial center banks balances larger than are necessary for domestic exchange purposes? (e) Would it be a satisfactory solution to allow the banks to invest part of their reserves in United States securities instead of putting them out on call loans? (f) Comment upon the following statement: "As a special inducement for customers—both banks and individual—to maintain balances of considerable proportions and in order to meet the competition of other banks, the bank at times pays interest upon deposit balances."

732. Federal Reserve Reduces the Range of Seasonal Variation of Interest Rates



Seasonal Interest Rates Before the Federal Reserve System

(a) How did the Federal Reserve accomplish the reduction in seasonal variation of rates?



Seasonal Interest Rates After the Federal Reserve System

733. Interest Rates for National Banks

The following bills illustrate the efforts put forth in Congress in attempting to regulate the interest rates during 1921 and 1922. These bills were introduced on April 12, 1921, and April 2, 1922, respectively:

A BILL to establish uniform maximum interest and discount rates for national banking associations:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the maximum rates which may be charged by any national banking association are, for the interest on loans, the rate of 6 per centum per annum, and for discounts and overdrafts the rate of 7.3 per centum per annum, or 2 cents on the hundred dollars per day.

Sec. 2. That this act shall take effect on July 1, 1921.—[67th Congress, 1st session, 1921, S. 553.]

A BILL (2) to regulate the rate of interest that may be paid by national banks in certain cases.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in any State of the Union in which the rate of interest that may be lawfully paid by a State bank therein, or any deposits of money made in such bank, is regulated or fixed by the laws of such State, and a bank depositor's guaranty fund, by whatever name known or called is created or provided, by the laws of such State, no national bank in such State shall directly or indirectly by itself, or through another, pay, or allow, on any deposit made in said national bank in said State, any rate of interest, bonus, charge, or commission, directly or indirectly, higher, greater or in excess of the rate of interest so fixed, or provided, under and by virtue of the laws or statutes of said State, as construed by the court of last resort therein.

Sec. 2. That any and all Acts of Congress in conflict with this Act are hereby repealed.

Sec. 3. That this Act shall take effect upon its approval by the President.—[67th Congress, 2nd session, 1922, S. 3512.]

(a) In the first bill there are provided three different rates. Which of the three do you consider most favorable to the borrower? Which is higher 2 cents on a hundred dollars per day, or 7.3% per annum? Why was 7.3% specified rather than 7.5 or some other figure? (b) What was the occasion of the introduction of these bills? (c) Is it any more logical to fix a maximum interest rate than it would be to fix a maximum price for wheat at a country elevator? Explain. (d) Why should the question of interest rates have received more attention in Congress in 1921 and 1922 than in 1925? (e) How do you account for the fact that a preferential rate of interest should be advocated for loans as compared with that for discounts and overdrafts? (f) The Comptroller has ruled that national banks are not legally permitted to permit overdrafts. Would the provision in the first bill be an authorization for national banks to use the overdraft form of lending, or would it be a contradiction of the Comptroller's ruling?

734. Interest on Federal Reserve Balances

A Bill obligating Federal reserve banks to pay interest upon all realized balances, whether reserve or otherwise, maintained by all member banks. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Federal Reserve Act, approved December 23, 1913, as amended, be, and the same is hereby, amended by adding to section 19 subdivision (d) after subdivision (c) to read as follows: "(d) The Federal reserve banks are hereby obligated and required to pay every bank, banking association, or trust company which is or which becomes a member of any Federal reserve bank, interest at the rate of 2 per centum per annum on all realized balances, whether reserve or otherwise."—[68th Congress, 1st session, 1923, H. R. 3206.]

(a) What was the law at the time this bill was introduced regard-

ing the payment of interest on deposits by federal reserve banks? (b) Do you think the change proposed in this bill would be a good thing? Why? (c) In what way do banks reduce their reserves to a minimum so as to increase their income but yet be certain that their reserve requirements will be properly provided for? (d) Do central banks in Europe pay interest on bank balances? (e) Make a calculation of the burden this legislation would have imposed on the federal reserve banks? What effect would it have had on their discount and open market policies?

735. Interest Rate on Time Deposits Reduced

The following notice was made by the banks in one Minnesota town in 1925:

NOTICE

.....

In order to better safeguard our depositors and following the lead of several conservative Banks in.....Minnesota, the undersigned Banks of.....announce a reduction in the rate of interest on

CERTIFICATES OF DEPOSIT AND SAVINGS ACCOUNTS

from four per cent to three per cent, effective July 1, 1925.

This seems advisable on account of the large accumulation of money placed on time deposit during the past few years.

High grade bonds and securities in which Banks are compelled to invest considerable of their deposits, are selling at such low yields that they cannot safely invest their funds at rates which warrant them to continue paying four per cent on Time Certificates and Savings Deposits.

This notice is given in accordance with rules and regulations governing Time Deposits.

Dated at....., Minn., this.....day of.....1925.

(a) Is a 4% rate higher than commercial banks can profitably pay their depositors on time and savings deposits? (b) Is the low yield on high-grade bonds and securities stated in this notice sufficient reason for these banks to reduce their interest rates? (c) If these banks have such a large volume of time deposits, should they not be in a position to provide farmers with all the funds they need?

736. Prevailing Interest Paid on Time Deposits in Minneapolis Federal Reserve District

The following quotation shows very clearly the prevailing interest paid by national and state banks on time deposits in 1926 as compared with 1923.

The prevailing interest rate paid on time deposits by national banks in this district has been reduced 1% or more between 1923 and 1926. Although the reduction has not been uniform for all banks, the most common rate paid has been reduced from 5% to 4% in Minnesota, Montana and South Dakota and from 6% to 4% in North Dakota. In the portions of Michigan and Wisconsin which lie within this district, there has been very little reduction in the rates paid, but these rates were already low in 1923.

On June 30, 1923, nine national banks in this district were paying 7% on all or part of their time deposits; 229 banks were paying 6%; 475 banks were paying 5 or 5½%; 329 banks were paying 4 or 4½%; and only 102 banks reported rates as low as 3 or 3½%. It must be noted that the total number of banks, adding the figures quoted above, is larger than the number of banks actually in operation because many banks reported two or more rates on different kinds of deposits. On June 30, 1926, no banks reported rates higher than 5% and only 56 banks paid as high a rate as 5%. Of the remaining banks 455 banks paid 4 to 4½%; 146 banks paid 3 or 3½% and one bank paid 2% on part of its time deposits.

Interest paid on deposits by member banks in this district consumed 38 per cent of gross earnings in 1923 and 39% of gross earnings in 1924 and 1925. A larger proportion of gross earnings was paid out in interest on deposits in this district than in any other district. The percentage for the member banks in the United States as a whole was 32% in 1923, 33% in 1924 and 34% in 1925.—[*Monthly Review,* Minneapolis Federal Reserve Bank, July 1926, p. 248.]

(a) What do you understand by the prevailing interest rate? (b) What are time deposits? (c) How does the rate paid by national and state banks in the Minneapolis Federal Reserve District compare with the rate paid by similar banks in New York City? Chicago? Agricultural districts of Iowa or Louisiana? San Francisco? Oregon or Washington? (d) Account for the slightly lower rate in 1926 than in 1923. (e) Does the interest paid by banks on their deposits amount to much as compared with their total expenses? (f) At approximately what rate would banks paying 4½ to 6% have to lend their funds in order to realize a fair margin of profit? (g) What dangers, if any, are there in a bank's paying such a large interest rate on time deposits?

737. Interest on Government Deposits

Prior to 1908 interest had never been required on Government deposits. After the Act of 1908 interest at the rate of 1% per annum was collected on so-called "inactive accounts" in national banks. By "inactive accounts" is meant a special deposit (usually $1,000) which remains fixed or stationary in amount. The aggregate of such accounts on the 1st day of June 1913 was $1,286,500 and the entire amount of interest collected by the Government thereon during the preceding period of about five years was approximately $715,000.

On April 30, 1913, the Secretary announced that beginning June 1,

1913, all Government depositaries, active as well as inactive, would be required to pay interest at the rate of 2% per annum on Government funds. Only 9 of the total number of national banks holding Government funds refused to pay interest under the new regulation.

Hundreds of applications were received from other banks seeking Government deposits on the new terms, many of which were granted. The Government has not had the slightest difficulty in placing its deposits at 2% interest.—[Annual Report of the Secretary of the Treasury, 1913, p. 5.]

(a) What was the purpose of these inactive accounts? (b) Is the government justified in charging banks 2% interest on the average balance maintained with national banks? How does the rate paid to individual and firm depositors compare with this rate on government deposits? (c) Was the $715,000 interest received by the government net gain? Explain. (d) Do the federal reserve banks pay the government interest on the balances carried with them?

738. Interest Paid on State or Public Deposits

The practice varies considerably from state to state. The following statements obtained from reliable and official sources show the conditions in certain states:

I. The rate is 2% on active public deposits and 4% on time deposits (six months). State deposits in this case include state, county and city funds. They may be secured by bonds or surety bonds There has been no loss on public deposits. Eligible bonds include United States government bonds, bonds of the state or any subdivision thereof, and irrigation bonds. The bonds securing state funds are held by the state treasurer. Bonds securing county and city funds are held by the county and city treasurers.

II. The minimum rate of interest allowed by the state Deposit Act and the county and municipal Deposit Act is 2% on the average daily deposits, to be paid quarterly. The deposits are bid for by the various banks and the rate is determined by the bids. At present time (summer 1925) the average rate in one city was 2.92%. The rate for the state as a whole was estimated at 3%.

III. Interest on all public deposits is at the rate of 3%. All public deposits whether of state funds or those of political subdivisions are protected by surety bonds (of surety companies) except that federal land bank bonds are acceptable as security. Bonds are kept by state treasurer.

IV. The state banking law does not contain any provisions regarding the protection of public funds. It is customary, however, for security to be required, either personal or surety. State funds

usually bear interest at the rate of 2½%; the rate on other public funds varies from 3 to 4%.

V. State funds on deposit in Maine receive 2½% interest on the daily balance or checking account. There is in addition a small amount kept on six months' deposit at 4% interest. No bonds are required as security. It is the general rule for deposits of cities, counties and towns to receive 2 or 2½% interest.

VI. The commissioner of banking stated that banks paid 3% interest on state deposits. A bank as state depositary may pledge as collateral real estate. The property must be taken at its assessed valuation and the amount against it must not exceed 75% of the value of the collateral. Banks may give surety bond in which case the deposits may be equal to the amount of the bond given. Political subdivisions deposit their funds but do not require bond to protect them

VII. The average rate of interest paid on public deposits in this state is 4%. Before banks can become state depositaries they must have a capital account of $50,000. As security for the deposits, surety bonds will be acceptable, or state or municipal bonds. In some cases a personal indorsement is sufficient if the indorser can prove he is worth an ample amount to make the indorsement absolutely safe. There is no law specifying the rate, but the state has been receiving 4% for a number of years.

(a) Can banks afford to pay 3 or 4% on public deposits? (b) What justifications are given of the policy of state governments of requiring that specific security be given against public deposits? (c) Are they a preferred group of depositors? (d) What are the criticisms of the practice in some states of awarding public deposits to the bank or banks paying the highest rate of interest on the average balance?

739. Proposal to Limit the Federal Reserve Banks to a Maximum Rate of Interest

On April 13, 1921, and April 24, 1924, respectively, the following bills were introduced in the United States Senate for the purpose of regulating the interest rate charged by federal reserve banks:

A Bill to limit rate of interest chargeable to Federal reserve banks to 5 per centum per annum.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That from and after the passage of this Act the maximum rate of interest which the reserve banks of the Federal Reserve System are authorized to charge member banks in any contract, agreement, or any other financial transaction had with them shall be 5 per centum per annum.

Sec. 2. That it shall be unlawful for any of said Federal reserve banks to charge member banks in any transaction had with them a greater rate than 5 per centum.

Sec. 3. That all laws and parts of laws in conflict with this Act be, and the same are hereby, repealed.—[67th Congress, 1st session, 1921, S. 836.]

A BILL to amend the Act known as the Federal Reserve Act, approved December 23, 1913, as amended by an Act approved March 3, 1919.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That subsection (d) of section 14 be amended by a striking out of all that subsection and substituting the following:

"The rate of discount and rediscount to be charged by Federal reserve banks shall be 2 per centum per annum. No deviation from this rate shall be permitted except by authority of Congress."—[68th Congress, 1st session, 1924, S. 3204.]

(a) If you assume that there should be a maximum interest rate fixed by law, why should federal reserve banks be limited to 5% when most state laws fix the usury rate 6% or higher? (b) If the federal reserve banks are limited to 5%, why should not the law be extended to member banks so that the low interest rate may be passed on to the borrower? (c) What would be the effect of such a law upon the operation of a federal reserve bank as a central banking institution? (d) What factors should determine the rate charged by federal reserve banks to member banks? (e) What would be the result if the rediscount rate was arbitrarily fixed by statute at 2% as proposed in the second bill?

740. Rate of Interest on Deposits in London

The following table exhibits the rate of interest charged by the banks and bankers of London for discounts, and also the rate of interest allowed on deposits during 1882, 1883, and the first half of 1884:

	Second Half 1882 % per annum	First Half 1883 %	Second Half 1883 %	First Half 1884 %
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Average market rate of discount	3 9 3	3 4 3	2 17 1	2 5 5
Average allowance on deposits	3 0 6	2 12 11	2 8 10	1 16 5
Profit margins	0 8 9	0 11 4	0 8 3	0 9 0

(Figures from London *Bankers' Magazine*, July, 1884)

[Report of the Comptroller of the Currency, 1884, p. 59]

(a) The rate of interest allowed on deposits in London at this time was usually 1½% to 1% per annum below the rate of the Bank of England on discounts: what is the present relationship?

(b) State the above profit margins as decimals fractions of the principal. Did the New York City banks make as wide a margin on bankers' balances? Did the New York bankers assume any obligations, expressly or by implication, to the depositing correspondent bank which the London banks did not? How ought this difference, if any, to affect the profit margin? (c) Do the New York Clearing House regulations now provide for automatic adjustment of the rate of interest paid on bank balances to the prevailing discount rate? (d) What objection during the late war did the United States Treasury and the federal reserve authorities make to an automatic adjustment of the rate paid by New York banks on deposits and the federal reserve discount rates?

741. Relation of Bank of England Rate to the Market Rates (about 1903)

Rates prevailing in the market at one time:

MARKET DISCOUNTS:

60 day loans	3⅞%
3 month bank bills	3⅞
4 " " "	3⅞-3 15/16%
6 " " "	3⅞–3 15/16%
3 " fine trade bills	4½%
4 " " " "	4½%
6 " " " "	4½–4¾%

BANK AND MONEY RATES:

Bank rate	4%
Bank of England loans	4½%
Bankers' deposit rates	2½%
Brokers' deposit rates	3%
Brokers' notice rates	3¼%
7 day market loans	3–3½%
Day to day money	1½–2½%

(a) Why are the rates for 6 months' bills shaded a fraction over 3 months' bills? (b) Why are the rates for trade bills higher than for bank acceptances? (c) The Bank charges ½% above the published rate for 7-day loans; therefore every dealer in money tries to meet his engagements without its aid. On what occasions do these loans grow large? (d) The banks generally allow 1½% below the bank rate for deposits, except when very low, when there is a difference of only 1%: which difference existed on this day? Why should there be such a difference between the discount and deposit rates? (e) If the brokers' deposit rate is higher than the banks' deposit rate, what does it signify? (f) Why are brokers' notice rates higher than the brokers' deposit rates, by ¼%? (g) Why is day-to-day money cheapest?

742. Fortnightly Settlement of London Stock Exchange Contracts

I. Stock Exchange members are separated into these two classifications (broker and dealer), and the Rules and Regulations state that: "No member or authorized clerk shall carry on business in the double capacity of broker and dealer." Also "A broker shall not make prices or otherwise carry on the business of a dealer." Again, "A broker may not put business through for another broker"; and, again, "A dealer shall not deal for or with a non-member." . . . The dealer does not come in contact with the public and buys from and sells to brokers who have orders from their customers. The dealer, or so-called jobber, in London is accustomed to buy or sell at close market prices in amounts ranging from ten shares to many thousands, and he changes his position and prices according as to whether the demand or supply is greater. For the business of a dealer as carried on in London, term settlements are almost a necessity in order that he may have the opportunity during the interval between settlements to change his position and even up his contracts without having to settle each day for the preceding day's transactions.—[American Acceptance Council publications.]

(a) Contrast the London and New York relations of broker and dealer. What are the reasons for insisting upon the specialization of the functions of dealer and broker? (b) Does the dealer in London do anything not comparable with the speculator in New York which makes the fortnightly settlement more necessary in London than in New York?

II. Certified checks are not known in London and it is customary for brokers to deliver stocks and have their clerks return later for the check in payment thereof. Under London banking practices there are no priority checks, so that unless a broker's balance with his bank at the time of the bank clearing is sufficient to warrant the bank to pay all of his checks presented for payment, none of his checks is paid. Securities must be delivered not later than 2:30 p.m. on week days and 12 o'clock on Saturdays. The clearing of each day's business by the banks in London takes place in the afternoon. . . . According to the following sections of Rule 94 of the Rules of the Committee on General Purposes:

(2) Checks must be passed through the Clearing House, unless the Drawer consent to their being otherwise presented.

(3) If a Member require Bank Notes in payment for Securities sold, without having made such stipulation at the time of making the bargain, he must give notice to his Buyer to that effect before Half-past Eleven o'clock on the day of delivery, and payment shall be made upon delivery of the Securities, or the Stock receipt.

Section three of Rule 94 is practically never insisted upon.

As to the volume of money transfers on the Pay day of the settlement, the result shows an increase of cash clearing through the banks about double, so that, where on a daily average of £51,000,000 is cleared, the average on Stock Exchange Settlement days would be about £98,000,000.—[American Acceptance Council Publications.]

(a) Is there a specific reason why the use of certified checks has not developed in London? How are they used in New York in relation to stock market operations? (b) What is the object of passing the checks through the clearing house? (c) Does the London system provide for the clearance of loans as well as of contracts? (d) Why is notice required for demand of cash payment of securities?

743. Features of the Fortnightly Settlement of London Stock Exchange Contracts

I. In all markets having term settlements loans on stock exchange collateral are made for the period of the settlement and substitutions of securities in loans during that period are unusual. In London particularly the purchaser or seller for cash has to pay a higher or receive a lower price, and, as stamp taxes and additional fees contribute to making cash operations more expensive, cash trading is very rare. The call money market is not based on Stock Exchange collateral but the bulk of the call loans is made on acceptances and special governmental obligations. As in the operations of a term settlement the brokers know what their money requirements will be for the ensuing account a day or two in advance of the final settlement day of the current account, they are enabled to make their banking arrangements with the least possible disturbance; the discount market in the final analysis acting as the regulator of excess demand or supply of stock exchange money. In addition to banks, many banking or semi-banking firms make a practice of carrying brokers over from one settlement to another at an interest charge somewhat higher than current banking rates for the account; . . . on these loans no margin is required. On the other hand, banks insist on margins on Stock Exchange loans of about ten points, instead of the usual 20% required by New York institutions. This margin must be kept good.—[American Acceptance Council publications.]

(a) Why are cash operations discouraged on the London Stock Exchange? What effect does this have on the call money market? (b) Which is the better system, the London system which depends upon the discount market for call money and thus makes the financial market dependent upon the commercial market, or the New York system which depends upon stock exchange collateral loans from commercial banks? Is there an historical reason for this difference? (c) Is the 10% margin system in London less safe than the 20% margin system of New York? Does the size of the discount market warrant narrower margins?

II. The Committee on General Purposes of the London Stock Exchange in each month fixes the Account days for the second succeeding month. The operation of the settlement occupies four days: (1) the mining contango day, (2) the general contango day, (3) the ticket day, (4) the account day.

(a) What is done on each day?

744. Sinking Fund

"The annual sinking fund has been fixed at $83,290.94 to redeem a bond issue of $1,000,000 at the end of ten years. It is argued against this plan that the payments should be $100,000 per annum. Demonstrate which of these two amounts is the correct one, assuming the fund to be invested meantime at 4% interest, compounded annually. Show also the amount of the saving effected by the smaller sinking fund, discounted to maturity, and the amount to be returned to the borrower at the end of the period if the larger sinking fund ($100,000) were adopted. $(1.04)^{10} = 1.480244$."—[American Institute Examination.]

CHAPTER XXIV

BRANCH BANKING

745. Foreign Branches

I. Under authority of what law and of what supervising body does each of the following banks function in operating branches abroad?

(a) The Anglo-South American Bank, Ltd., 49 Broadway, New York. (b) The Dominion Bank, 35 Wall St., New York. (c) The International Banking Corporation, 60 Wall St., New York. (d) The Federal Reserve Bank of New York. (e) The National City Bank of New York, 55 Wall Street. (f) Brown Bros. & Co., 39 Wall St., New York.

II. An American bank desiring to develop foreign business will employ one of the following devices: (1) correspondent, (2) representative, (3) commandite, (4) affiliate, (5) subsidiary, (6) branch.

(a) Explain each method. (b) What are the special advantages of each? (c) What are the special disadvantages of each? (d) Why do most American banks depend upon correspondents? (e) Did the German banks use commandites, subsidiaries, or branches most in developing their world business before the War? (f) Illustrate each type of connection in case of an American bank; for example, the National City Bank of New York has foreign *branches,* the Farmers Loan and Trust Company of New York has a representative in Paris, etc.

746. Branches of English Banks

I. Internal Organization of a Branch:

(a) What are functions of the following departments of a branch of an English bank: (1) the "Waste office"; (2) the "Day Book"; (3) the "Bills and Securities' office"; (4) the "Correspondence Department"? (b) Distinguish between the work of the "manager" and the "accountant" of a branch.

II. "Giving Credit by Branch Advice"

. . . there are many occasions upon which one branch has to give credit to Head Office and other branches. The method by which this transfer of funds is effected is known as "giving credit by branch

advice."—[Minty, English Banking Methods, p. 203, Isaac Pitman & Sons, New York City, by permission.]

(a) What is the method of "giroverkehr" in Germany? (b) How are "crossed checks" used in England to accomplish the same types of payments? (c) Give an example of a case when payment in England would be effected by "giving credit by branch advice." (d) How is the opposite type of transaction handled, namely, where a branch takes the initial step in claiming money from another bank, for instance where it has paid checks of customers of another branch?

III. Examination of Distant Branches:

. . . in the case of a banking company registered after 15th August, 1879, if the company has branch banks beyond the limits of Europe, it shall be sufficient if the auditor is allowed access to such copies of and extracts from the books and accounts of any such branch as have been transmitted to the head office of the company in the United Kingdom, and the balance sheet must be signed by the secretary or manager (if any) and where there are more than three directors of the company at least three of those directors, and where there are not more than three directors, by all the directors.

(a) What is the physical difficulty in examining the distant branches of the English bank? What is the administrative difficulty in such examinations? Is the above arrangement satisfactory?

747. Attitude as to Branch Banks

In England:

The most that has ever been suggested has been to put some form of restriction upon banks amalgamating and bringing more branches under one management. It has never been suggested, in the interests of either the private banker or anyone else, that a legal check should be put upon joint stock banks opening new branches of their own.

In the United States:

Originally it was contemplated that the national banks should not open branches and national banks were forbidden to amalgamate. The majority of state legislatures were also hostile to the idea of state banks opening branches, and no state would allow a bank incorporated in another state to open branches in its territory.—[Minty, English Banking Methods, pp. 78-9, Isaac Pitman & Sons, New York City, by permission.]

(a) What are the reasons for this radical difference of policy? (b) In such cases as these prohibitions in the United States are modified have the independent banks been able to withstand the competition of the branch banks? How does the case compare with the competition of the private banks and joint stock banks in England after 1826?

748. Reason for Denying Application for New Branch

In proof of the allegation that the respondent had denied the applications here in suit solely because of the existence of the *de novo* rule the petitioner introduced in evidence a letter from respondent date March 10, 1925, which was in response to the petitioner's application for the opening of the branch on South Flower Street. In this letter the respondent stated in part: "I regret very much the necessity of denying this application. This denial is based solely upon the ground that the location of the proposed branch office is outside of the limits of the city in which is located the principal place of business of the applying bank. As perhaps you may know, I have announced and agreed to certain rules regarding the granting of branch offices, one of which is that no *de novo* permissions for branch offices shall be granted for a location outside of the city in which the principal place of business of the applying bank is located. There is no application which has come to me to which I would rather give my sympathetic and affirmative consideration than this one of yours, but unfortunately I consider that I am bound in the exercise of my discretion by the rule above referred to." This letter was addressed to the petitioner and was signed by the respondent in his official capacity. The respondent testified that said letter did not set forth the true reason for the denial of the application; that said application was denied after his personal survey and inspection of the local conditions and an ascertainment by him that the public convenience and advantage would not be promoted by the granting thereof; . . .—[Petition of plaintiff in Bank of Italy, *v.* Johnson, S. F. No. 11,654, in Supreme Court of the State of California, 1927.]

(a) Under what circumstances was the *de novo* rule adopted by the Superintendent of Banks in California? (b) Section 9 of the Bank Act provided that the approval of the Superintendent should not be given unless he found "that the public convenience and advantage will be promoted by the opening of such branch office." Has the Superintendent the right, in the exercise of this function of passing on the applications for opening new branches, to set up some such arbitrary rule as the *de novo* rule as a substitute for the "discretion" which he is expected to exercise? (c) In determining the matter of "public convenience and advantage . . . promoted by the opening of such branch" should he consider the local public who will use the bank, or the general public of the whole state, or both? if both, how should the two be weighted? (d) What importance attached to this lawsuit?

749. Record of Foreign Branches of American Commercial Banks

In all, these ten banking institutions established twenty-two regular foreign branch banks and acquired one branch installed by a foreign banking corporation—the Havana City branch of the American Foreign Banking Corporation which was taken over by the Chase National Bank in 1925. Twenty-two of these twenty-three regular foreign branches were never closed and continue in active operation today (1926). The only

other direct foreign offices opened by these banks were five emergency offices mentioned. These were all installed in England and France to aid in the prosecution of the World War and were withdrawn when their services were no longer needed by the American forces in Europe.

The remaining American bank interested in direct foreign branches is the National City Bank of New York. It did not start its foreign expansion until after the outbreak of the World War, being prevented from doing so until the establishment of the Federal Reserve System late in 1914. The bank established in all sixty-four foreign branches of which seventeen were withdrawn. The reasons for the withdrawal of these branches are essentially the same as those applying to the war-born foreign banking corporations.

The foreign expansion of the American foreign banking corporations (Edge Corporations) other than the two which are the subsidiaries of two great American commercial banks, ended in complete failure. These foreign banking corporations or foreign trade banks established in all, at one time or another, eighty-one foreign branches, and acquired two. Only one of the branches originally established by the foreign trade banks remains in operation as a branch of an American bank—the present Havana City branch of the Chase National Bank.—[Phelps, Foreign Expansion of American Banks, p. 163.]

(a) Why did the National City Bank of New York reduce the number of its branches by seventeen? (b) Why should the branches of the regular commercial banks succeed but those of the foreign banking corporations fail?

750. Advantages of the Branch Bank System

From the following allegations respecting the advantages and disadvantages of branch banks select those that are defensible, that are economically sound, that are true to fact, that are not based on rural jealousy of the urban and metropolitan centers:

(a) In Canada "seventeen banks now (1922) skim the cream from over 4,800 branches, leaving only skim milk for the rural and suburban populations."

(b) Branches make it possible to take capital from a section where it is less needed to a section where it is more needed.

(c) Branch banks can permeate the country to further degree on account of their low overhead costs.

(d) The American system of independent banks does not guarantee that control does not fall into the hands of single individuals, else why the Clayton Act prohibiting interlocking directorates and the Kern Amendment.

(e) The concentration of credit in hands of a few branch bank systems is undesirable economically and politically.

(f) The credit information service in system of many small

independent banks as in the United States is necessarily poorer than of a branch bank system where a corporation handles its entire financing through one bank.

(g) The clearing system is simpler and cheaper and more satisfactory than under an independent bank system.

(h) The service of branch banks is poorer because questions have to be referred to a distant main office.

(i) Absentee banking has too little local interest, too much metropolitan interest, for the proper development of the local resources.

751. Relation of Branch Banking to Federal Reserve

The discussion of branch banking seems naturally to divide itself into three main questions:

First, Is a reserve system, either governmentally or privately controlled, necessary?

Second, Can the present Federal reserve system survive the imposition upon it of large and powerful chains of branch banks which, in practice as well as in theory, are privately owned and privately controlled reserve systems?

Third, Can a general system of branch banks exist simultaneously with a system of independent unit banks?—[Report of the Comptroller of the Currency, 1923, p. 7.]

(a) What is the logic of this division of the discussion of branch banking question in the United States? (b) How does the Comptroller of the Currency answer each of the three questions raised?

752. Branches of National Banks

Section 5155, Revised Statutes of the United States (in 1902):

It shall be lawful for any bank or banking association, organized under State laws and having branches, the capital being joint and assigned to and used by the mother bank and branches in definite proportions, to become a national banking association in conformity with existing laws, and to retain and keep in operation its branches, or such one or more of them as it may elect to retain. . . .

Section 5134 provided in part that the organization certificate of a national bank shall show "the place where its operations of discount and deposit are to be carried on," and section 5190 that "the usual business of each national banking association shall be transacted at an office or banking house located in the place specified in its organization certificate."

Opinion of the Solicitor of the Treasury, August 10, 1899:

This section (5190 U. S. R. S.) contemplates that the usual business of a national banking association shall be transacted at one office and

banking house, and as receiving deposits and paying checks belong to the "usual business" of a bank, I am of the opinion that the statute does not authorize the establishment of an auxiliary cash room in a different part of the city for the purpose proposed. Besides, it may be observed that if a national banking association can lawfully establish and maintain a separate office for receiving deposits and paying checks, it could as well establish as many such auxiliary cash rooms in the city of its corporate residence as its business might require; and, indeed, the entire business of the bank may be parceled out and conducted in the same way all over the city.

The Supreme Court of the United States, in case of Armstrong v. Second National Bank, 38 Fed. Rep. 886:

Under this section (5190) it certainly would not be competent for a national bank to provide for the cashing of checks upon it at any other place than at its office or banking house.

Case of the Merchants' National Bank *v.* The State National Bank, 10 Wall. 604:

The provision requiring the "usual business" of the association to be transacted "at an office or banking house specified in its organization certificate" must be construed reasonably, and a part of the legitimate business of the association which cannot be transacted at the banking house may be done elsewhere.

The question involved in this case was the right of the bank's officers to purchase gold elsewhere than at its banking house, and the court held that . . .

The gold must necessarily have been bought, if at all, at the buying or selling bank, or at some third locality. The power to pay was vital to the power to buy, and inseparable from it.

(a) Justify, in the light of the above statutes and interpretations the following acts: (1) The establishment and use of clearing houses by national banks as places to pay and receive pay for checks and other items. (2) The authorization of "additional offices" for national banks to receive deposits and pay checks. [See Comptroller Crissinger's Opinions.] (3) The operations of the "money table" on the Stock Exchange floor. (4) The branches of the National City Bank of New York inside New York City. (b) Could a national bank operating in a large city evade the law fixing a minimum capitalization for a bank in such size city by assigning to branches part of its capital? (c) Have the statutes above quoted been changed since 1902, or the court decisions changed since that date, so that the national banks may now have branches?

753. Increase in Number of Banks with Branches Versus Changes in Total Number of Banks in Operation in the United States

Take the period 1919 to 1924 inclusive for purposes of comparison in this problem. The total number of banks in operation for each year is given in Annual Reports of the Comptroller of the Currency. The number of banks operating branches for each year is given in the table:

Year	[Banks with Branches				Total Number Banks in Operation[1]
	Number	Branches		Total	
		In City	Outside City		
1919	453	613	450	1,063	
1920	528	723	494	1,217	
1921	536	822	518	1,340	
1922	608	1,110	605	1,715	
1923	672	1,346	692	2,038	
1924	717	1,589	796	2,385	

[1] Do not include private banks.

(a) Add column giving total number of banks in operation each year. (b) Which has had the greater growth relatively during this period, branch banks or unit banks?

754. Branch Banks for an Agricultural State

From a letter from an Iowa banker on the proposal to allow branch banking in the state of Iowa as a remedy for the economic distress of the period 1921-26:

In considering the problem I find that I have only one argument in support of such a change which is not subject to refutation, that being the fact that the present system has failed and that beyond question of doubt, people wherever they may be located are entitled to the reasonable certainty that they may be able to withdraw funds which they have deposited in a bank and, my own personal feeling is that branch banking would afford that safety. However, I should like to point out to you some arguments which have been presented to me against such a change, which I really believe to be sound.

Primarily, any branch banking system must of necessity limit competition between such institutions as enter into that field and legislation so limiting competition, would I think, be difficult to obtain. It stands to reason that an institution such as our own would immediately take the opportunity of establishing branches and it would follow that our principal competitor would immediately attempt to compete with us at every point. In most of the rural communities in Iowa, one bank is all that is required and I do not believe that legislation could be passed which would

so prevent competition as to prohibit ruthless and unprofitable competition, in fact, wherever the system has been tried this very matter has resulted in many ills.

Concerning the usual arguments against the system, I have no additional comment but I should like to point out that in no State in America, has the system been tried outside of corporate limits in cities except in California and I have heard many competent authorities severely criticise the California system from a good many angles, the most important of which being, that before a great lapse of time, it must become evident that in order to find investment for funds, many dangerous and extended real estate extensions have been made by the banks there, which will prove to be as burdensome as are our inflated real estate loans. Nor is it out of recollection that one of the great Canadian Systems met with almost disastrous difficulty by reason of mis-management.

Size itself is of considerable protection I will grant that, but it cannot assure of itself proper administration. Moreover, banking deposits per se have ceased to be a profitable liability except in tremendous volume. With a consistently declining money market and no relief in sight, I question whether the accumulation of large deposits in a central bank under the system would prove to be profitable unless that bank had better than a commercial paper outlet for its funds, nor does it stand to reason that better bankers would be attracted to small branches under strict supervision from main offices than are now available in the rural communities except at considerably increased incomes which would scarcely be available.

(a) From the Report of the Comptroller of the Currency and the State Bank Commissioner calculate the number of banks per capita of population in the State of Iowa. The density is highest in this state: why? (b) How does the multiplicity of banks make for prevalence of failures with each ill wind of economic cycles? (c) Would the establishment of branch banking in the state tend to increase or decrease banking competition? (d) What differences of conditions between Iowa and California make less valid the argument for or against branch banking on the basis of the California experience? (e) Comment on the sentence: "banking deposits per se have ceased to be a profitable liability except in tremendous volume." Are they ever a profitable liability? Would branch banking effect the "tremendous volume" required? (f) If branches were substituted for rural unit banks would the personnel of the branches be of lower order than the personnel of the unit banks had been? If there were a decline in ability of the branch personnel, would the stricter supervision of the head office and the reference of all questions of policy to the head office compensate for the decline? (g) Was the failure of the Home Bank of Canada in 1924 due to the fact that it was a branch bank? to conditions that were brought about by the branch banking system of Canada? Were the losses per depositor in Canada from 1920 to 1926 from bank failures greater

than in the United States? (h) What is the evidence on the question, "Does branch banking check failures?" [See article under this heading in *Bankers' Magazine,* New York, 1926, pp. 594 *ff.*]

755. Comparison of Sections 8 and 9 of the McFadden-Pepper Act on Branch Banking with Sections 8 and 9 of H.R. 8887, Including the Hull Amendments

SECTIONS 8 AND 9 OF H. R. 8887

THE MCFADDEN BILL WITH AMENDMENTS PROPOSED BY REPRESENTATIVE HULL

(Shown by bold face type)

SEC. 8. That section 5190 of the Revised Statutes of the United States be amended to read as follows:

"SEC. 5190. The general business of each national banking association shall be transacted at only one office or banking house, which shall be located in the place specified in its organization certificate, and no such association shall own, establish, maintain, or operate any branch or branches in any State which does not **at the time of the approval of this Act** by law or regulation authorize banks created by or existing under the laws of such State to own, establish, maintain, and operate such branches, and no such association in any State whatsoever shall own, establish, maintain, or operate any branch or branches beyond the corporate limits of the municipality wherein such association is located, but any such association in any State which by law or regulation authorizes banks created by or existing under the laws of such State to own, establish, maintain, and operate such branches may, upon application to the Comptroller of the Currency and upon approval by him, be permitted to establish and operate a branch or branches within the corporate limits of the municipality wherein such association is located, but it shall be unlawful for any such association to maintain in operation more than one such branch within the corporate limits of such a municipality where the population by the last decennial census is not less than twenty-five thousand and not more than fifty thousand, and more than two such branches where such population is not less than fifty thousand and not more than one hundred thousand: **Provided, however,** That all such branches of such associations shall be subject to the general supervisory powers of the Comptroller of the Currency and shall operate under such regulations as he may prescribe.

"The term 'branch' or 'branches' as used in this section shall be held to include any branch bank, branch office, branch agency, additional office, or any branch place of business located in any State or Territory of the United States or in the District of Columbia at which deposits are received or checks cashed or money loaned."

SEC. 9. That the first paragraph of section 9 of the Federal Reserve Act be amended by adding at the end thereof two provisions and a new paragraph to read as follows:

"**Provided,** That on and after the approval of this Act the board shall not permit any such applying bank to become a stockholder of such Federal reserve bank except upon condition that such applying bank re-

linquish any branches which it may have in operation beyond the corporate limits of the municipality in which the parent bank is located and no such applying bank in any State which by law or regulation in force at the time of the approval of this Act, prohibited State banks and trust companies created by or existing under the laws of such State, from having branches within the limits of municipalities in such State, or in any State whose laws, at the time of the approval of this Act, are silent with reference to the authority of such State banks and trust companies to have such branches, shall be permitted to become such a stockholder except upon condition that it relinquish any such branches which it may have in operation: Provided further, That no member bank shall, after the approval of this Act, be permitted to establish a branch beyond the corporate limits of the municipality in which such bank is located, and it shall be unlawful for any such member bank to maintain in operation more than one such branch within the corporate limits of such a municipality where the population by the last decennial census is not less than twenty-five thousand and not more than fifty thousand, and more than two such branches where such population is not less than fifty thousand and not more than one hundred thousand. And provided further that no such member bank shall be permitted to establish any branch within the limits of the municipality in which such bank is located, in any State which by law or regulation at the time of the approval of this Act, prohibited State banks and trust companies created by or existing under the laws of such State from having branches within the limits of such municipalities in such State, nor in any State whose laws at the time of the approval of this Act were silent with reference to the authority of such State banks and trust companies to have such branches.

Sections 8 and 9 of McFadden-Pepper Act, approved February 25, 1927

Sec. 8. That section 5190 of the Revised Statutes of the United States be amended to read as follows:

"Sec. 5190. The general business of each national banking association shall be transacted in the place specified in its organization certificate and in the branch or branches, if any, established or maintained by it in accordance with the provisions of section 5155 of the Revised Statutes, as amended by this Act."

Sec. 9. That the first paragraph of section 9 of the Federal Reserve Act, as amended, be amended so as to read as follows:

"Sec. 9. Any bank incorporated by special law of any State, or organized under the general laws of any State or of the United States, desiring to become a member of the Federal reserve system, may make application to the Federal Reserve Board, under such rules and regulations as it may prescribe, for the right to subscribe to the stock of the Federal reserve bank organized within the district in which the applying bank is located. Such application shall be for the same amount of stock that the applying bank would be required to subscribe to as a national bank. The Federal Reserve Board, subject to the provisions of this Act and to such conditions as it may prescribe pursuant thereto may permit the applying bank to become a stockholder of such Federal reserve bank.

"Any such State bank which, at the date of the approval of this

Act, has established and is operating a branch or branches in conformity with the State law, may retain and operate the same while remaining or upon becoming a stockholder of such Federal reserve bank; but no such State bank may retain or acquire stock in a Federal reserve bank except upon relinquishment of any branch or branches established after the date of the approval of this Act beyond the limits of the city, town, or village in which the parent bank is situated."

(a) To what extent would the Hull Amendments have restricted branch banking beyond that of the provisions of the McFadden-Pepper Act as approved? (b) Why were the Hull Amendments not included in the final bill as passed by Congress and approved by the President? (c) Does the McFadden-Pepper Act put national banks on a basis of equality with state banks with respect to branch banking? Explain.

756. Increase in Branches After Enactment of McFadden-Pepper Act

The following newspaper statement shows the interest which is being manifested in branch banking. Previous to the passage of the new legislation, national banks were permitted to establish "additional offices" only.

NEW YORK CITY GETS SIX BRANCH BANKS

Treasury Department Allows
Thirty-one for the
Entire Country

Washington, D. C., April 11, 1927.—Six branch banks have been authorized in New York City by the Comptroller of the Currency under the McFadden Branch Banking act, and a total of thirty-one for the entire country, the Treasury Department announced today.

The New York national banks permitted to establish branches are:
Central National Bank, New York City
National City Bank, New York City
Bowery and East River National Bank, New York City
Queensboro National Bank, Corono Heights, N. Y. C.
The Genesee National Bank of Buffalo, Buffalo, N. Y.
Highland National Bank and Trust Company of Newburgh, Newburgh, N. Y.

Five Branch banks were authorized in New Jersey:
The First National Bank of Jersey City
The South Side National Bank and Trust Company, Newark
The National Newark and Essex Banking Company of Newark

The largest number of branches for any one bank was nine for the Fourth and First National Bank of Nashville, Tenn., the Comptroller explaining that these were taken over from affiliated State institutions.

Six branches were allowed for the First National Bank of Louisville, Ky.

Two were allowed for the Central National Bank of Philadelphia.

One branch was allowed the Bank of California, National Banking Association, San Francisco.

Comptroller McIntosh today received in a body the Board of Directors of the Franklin National Bank of Jersey City, who presented the needs of the bank for more branches. While the meeting was behind closed doors, the Comptroller disclosed that their pending application for two branches had been changed to an application for one, which was taken under consideration. No criticisms of the Comptroller's policy were offered, in fact it was understood that the directors denied a story that they had intended to present charges of favoritism in the authorization of branches.

(a) How did the McFadden-Pepper Act change the branch banking situation in New Jersey? (b) Are any of the banks in the foregoing list located in states where state branches are prohibited? (c) Is state-wide branch banking permitted in Tennessee?

757. Relation of the McFadden-Pepper Act to Branch Banking in New Jersey

In anticipation of the passage of federal legislation regarding branch banking, the following act was passed by the General Assembly of New Jersey and approved March 3, 1925:

1. Banks (other than savings banks) and trust companies, organized under the laws of this State, may establish and maintain branch offices or agencies for the transaction of their business, with the approval in writing of the commissioner of banking and insurance, which approval shall be given by him only if it shall appear to him that the establishment of such branch office or agency will be of public service; nor shall the establishment of such branch office or agency be approved by the commissioner of banking and insurance unless the capital of such bank actually paid in in cash shall exceed the amount required by law for the incorporation of a bank, to the extent of fifty thousand dollars and the capital of such trust company actually paid in in cash shall exceed the amount required by law for the incorporation of a trust company, to the extent of one hundred thousand dollars for each branch office or agency so established; nor shall such approval be given for the establishment of any such branch office or agency outside the city, town, township, borough or village in which such bank or trust company is located, nor shall any bank or trust company maintain and operate a branch office or agency within the corporate limits of a city, town, township, borough or village where the population by the last decennial census is less than twenty-five thousand; nor more than one such branch where such population by said census is more than twenty-five thousand and not more than fifty thousand; nor more than two such branches where such population by said census is more than fifty thousand and not more than one hundred thousand, and where such population by said census is more than one hundred thousand the number of such branches shall be such as may be determined by the commissioner of banking and insurance; nor shall the establishment of such branch office or agency be approved by said commissioner unless at the time thereof national banking associations, organized under the

laws of the United States, and located in the State of New Jersey shall, by act of Congress, be enabled to originally establish branch offices or agencies for the transaction of their business within this State; provided, that nothing in this act contained shall prevent the maintenance of any branch office or agency heretofore lawfully established.

(a) Was this an attempt to keep the New Jersey state banks on an equality with national banks? (b) How does the number of branches allowed state banks compare with those permitted national banks? (See McFadden-Pepper Act, Problem 755.) (c) Are the state banks limited to the city of the parent institution as in the case of national banks?

758. Policy of Federal Reserve Board with Respect to Branch Banks

Whereas the Federal Reserve Board is authorized by the Federal reserve act to prescribe conditions under which applying State banks may become members of the Federal reserve system: Now, therefore, be it

Resolved, That the board continue hereafter as heretofore to require State banks applying for admission to the Federal reserve system to agree as a condition of membership that they will establish no branches except with the permission of the Federal Reserve Board.

Be it further resolved, That, as a general principle, State banks with branches or additional offices outside of the corporate limits of the city or town in which the parent banks are located or territory contiguous thereto ought not be admitted to the Federal reserve system except upon condition that they relinquish such branches or additional offices.

Be it further resolved, That, as a general principle, State banks which are members of the Federal reserve system ought not be permitted to establish or maintain branches or additional offices outside the corporate limits of the city or town in which the parent bank is located or territory contiguous thereto.

Be it further resolved, That in acting upon individual applications of State banks for admission to the Federal reserve system and in acting upon individual applications of State banks which are members of the Federal reserve system for permission to establish branches or additional offices, the board, on and after February 1, 1924, will be guided generally by the above principles.

Be it further resolved, That the term "territory contiguous thereto" as used above shall mean the territory of a city or town whose corporate limits at some point coincide with the corporate limits of the city or town in which the parent bank is located.

Be it further resolved, That this resolution is not intended to affect the status of any branches or additional offices established prior to February 1, 1924, either those of banks at the present time members of the Federal reserve system or those of banks subsequently applying for membership in said system.—[Report of the Comptroller of the Currency, 1923, p. 15.]

(a) Under this resolution did the Federal Reserve Board allow member state banks to establish de novo branches outside the parent city? to buy an independent bank and convert it into a branch? (b)

Did the above policy have the effect of driving member state banks with branches or state banks which desired to extend their branch system, from the Federal Reserve System? (c) Did the above policy correct the adverse competition of state branch banks and independent banks in California?

759. Management and Control of Additional Offices of National Banks

Regulations were issued by the Comptroller of the Currency to control the organization and operation of these "teller-windows" or "additional offices." The last four sections dealing with operating problems were as follows:

7. Operations of additional offices of national banks established under these regulations shall be confined to the receipt of deposits and the payment of checks and other such routine or administrative functions.

8. No investment in bonds or other securities for the account of the bank shall be made at any such additional office.

9. No loan or discount shall be made to any customer of the bank through any such additional office that has not been authorized at the banking house by a resolution of the board of directors, or by an appropriate committee of such board, or by an officer or officers acting under authority from such board, and no general authority issued by the board of directors shall vest in any officer or employee at such additional office any discretionary authority with reference to making such loans or discounts.

10. A statement of the business conducted at such offices shall be transmitted to the banking house as of the close of business daily, shall be incorporated on the books at the banking house at regular intervals, and shall enter into all statements of the condition of the bank.

(a) Outline the various operations which the office may carry on by reason of the powers granted in section 7. (b) Are the operations carried on under section 7 any less banking functions than those referred to in sections 8 and 9? (c) Why should not the manager in charge of these offices be allowed to extend loans up to a certain amount (the amount to depend on the size of the office and ability of the manager)? (d) Do state banks operating branches usually publish separate reports for each branch or a consolidated report for the bank as a whole? Wherein, if at all, does the management of a state bank branch differ from that prescribed for national banks?

760. Lending Power of Branches

The control of local or city branches is simpler than the control of state-wide branches. City branches are usually under the general supervision of the head office. The proximity of such branches en-

ables the officers (in the main office) to keep in constant touch with the branch manager. No local advisory committee is required. Some banks operating branches have formed a definite policy of having a local committee. The Grenada Bank, Grenada, Miss., has such a committee at each of its twelve branches. Wherever possible a director of the Grenada Bank is appointed at the point where each branch is located.

The administration of the branches of banks operating on a state-wide basis varies considerably. In some cases there is a policy of having a certain definite amount of capital assigned. If there are stockholders of the bank residing near the branch, a certain number of them may be elected as a local committee. In one case the local directors, if only one or two in number, form ex-officio the discount committee of such branch bank. This policy is of course quite flexible and may be done away with entirely. From the point of view of local prestige and business it is desirable to have them. They help to secure local business for the branch and help in part to allay any feeling against outside ownership and control in the bank.

The powers and duties of different branch managers vary considerably. Much depends upon the policy of different banks, whether the office is located nearby or at a distance, and the training and ability of the particular branch manager. In general, it may be said that the authority of a branch manager is usually circumscribed. Frequently he may have the power to lend up to a certain maximum depending upon the borrower and his collateral.

Section 6. Loans.—Loans not exceeding two thousand dollars ($2,000) may be made by an Assistant Cashier at a branch bank in a town having no local Directors, but where there is a local Director or Vice-President, the consent of one or the other shall be had before making a loan of over one thousand dollars ($1,000). No loan in excess of two thousands ($2,000) shall be made without the consent of the President or Cashier, or in their absence, by three members of the Discount Committee.—[By-Laws, Grenada Bank, Grenada, Mississippi.]

Some managers are allowed to lend up to a fixed amount without referring the loan to the head office except to report in his usual way. The report in such case is made as a part of the regular routine of the branch in reporting to the head office. In addition to the amount which may be advanced on this basis, he may, in some cases, lend a certain fixed amount over and above this by referring it to the head office later for approval. Where still larger amounts are required by the borrower, the branch manager must first secure the approval or authorization of the home office. The branch manager may, of course, under such conditions provide for emergencies by

having the borrower arrange for a line of credit through the officers of the home office. He can then advance the funds to his borrowing customer as the funds are required but in accordance with the terms of the line of credit already established. The practice of two banks in this regard is given more in detail as follows:

Loans in excess of $25,000 to a single firm, individual or corporation, are prohibited, except upon cotton actually stored in warehouse and insured against loss by fire, or upon bill of lading, or in case of short time loans upon collateral or indorsement of such value as to render payment at maturity indubitable.

President Clark of the First National Bank, Detroit, Michigan, made the following statement regarding this point:

The branch, as a rule, makes no loans. The branch manager, of course has authority to make loans up to a certain limit (say $500 to $1,000) to his customers, but all applications for loans above this limit go before the officers and directors of the bank.

In Canada where branch banking is highly developed, the territory is divided into districts and a superintendent appointed to supervise the banking in his district. Even with this system the Canadian branch managers have considerable discretion, depending upon their experience and ability. The independent lending power varies from $1,000 for new managers to $5,000 for experienced men. Amounts in excess of these must be referred to the superintendent's office for approval. The superintendent has power to approve loans up to $25,000 and beyond that the application will usually be sent to the head office for final approval. The branch manager has unlimited power to reject a loan. No loans will be authorized ordinarily without the manager's approval. It is evident, therefore, that the branch manager of a Canadian bank has very important powers.

(a) Compare the services which a branch bank could render you if you wanted a loan of $25,000 with those of our unit system of banks. (b) Does the Canadian system of branch bank management work better than that of the American branch as illustrated by the two banks referred to above? (c) To what extent do you think the criticism that branch banks cannot meet a loan emergency is well-founded? (d) Would a branch system render better facilities for the average-sized business man than unit banks in small communities? Which would better meet the needs of large business in such communities? (h) Why should branch managers be restricted in their lending power?

761. Standardization in Branch Banking

The way in which English banks have solved this problem (that of branch control) is simple in the extreme. It is the standardization of all

returns rendered to head office and a standardization of the mode of effecting every transaction so that there is one and only one recognized way of effecting it which must be observed by all branches.—[Minty, English Banking Methods, p. 113, Isaac Pitman & Sons, New York City, by permission.]

(a) How does this standardization policy handicap a bank in introducing improved methods and devices? For example, are accounting machines used as freely in English banks and in the American? Is the less use due to cheaper labor or to the standardization of methods throughout the branch system? (b) In framing its system does the parent bank base it on the necessities and volume of business of the largest branches, the smallest, or the average?

762. Nature of Chain Banking

The term should first be defined. It is understood that a chain of banks consists of a group of banking institutions which have been brought under the same control or which have a community of interests. Such community of control exists at least to the extent of a mutual arrangement or understanding whereby an interbank policy is formulated for all members of the "chain." Such a policy then governs the relationship of any individual bank as related to any other or to all of the remaining members of the group.

Control or oversight of different banks is usually obtained in one of the three following ways: (1) through the ownership by one individual or group of individuals of a large block of the stock of different banks, thus procuring complete or substantial control of them, (2) through holding companies which are organized for the purpose of holding the majority of the stock in a number of banking institutions, (3) on a contract basis. In the last case a company or organization is formed for the purpose of providing certain services for a number of banks, each bank paying an annual premium fee. This advisory company may not own any of the stock of the bank, but through this agreement it is enabled to bring about a policy which works out presumably for the best interest of the central or controlling company.

Like results may be and often are brought about by interlocking directorates. Under such an arrangement the directors may reach a so-called "gentlemen's agreement" whereby one bank undertakes to cooperate with another bank in dividing up business so that they get substantial interbank control or a larger volume of business. Large loans may be "split up," and each bank may then take its share.

(a) How does chain banking differ from branch banking? (b) What is meant by "interlocking directorates"? (c) What are the

benefits to be derived from chain banking? (d) What are the dangers of chain banking?

763. Chain Banking of Wisconsin

There is a much more serious situation existing and no law on the statute books now controls it. Everything that has been said or can be said against branch banking applies to this condition to a much greater degree. I refer to the chain banking system which exists to some extent in Wisconsin. It is an increasing evil. Corporations exist in several neighboring states engaged in the business of purchasing stock in banks. Ordinarily they try to purchase a sufficient amount of stock to give them control. They sometimes purchase all of the stock. One Minnesota corporation is the owner of stock in twenty-three Minnesota banks, seven Wisconsin banks, two North Dakota banks and one Michigan bank making a total of thirty-three banks. There are other corporations engaged in this same business and indications that additional holding corporations will be formed. This chain system might not be objectionable if the management of the controlling corporation was always conservative and their total investment in paper limited to a very small amount. This policy is not always followed by the controlling corporation. It was in January 1919, I believe, that one chain system met with disaster in Minnesota resulting in the banking department of that state closing fourteen banks of the chain in one day. It was found that all of the banks were loaded to the limit with the same class of paper. Officers of the corporation and several officers of banks were sent to the penitentiary as the result of this crash.

The Wisconsin Banking Department has had experience with efforts of promoters to gain control of Wisconsin banks. Within the past two years a North Dakota citizen who owned several banks in that state, in Minnesota, Illinois and Indiana sought to purchase control of several Wisconsin banks. His method was to pay for the stock out of the assets of the bank, substituting North Dakota paper for the good Wisconsin paper which he turned over to the shareholders in payment for their shares. Fortunately the department learned of his efforts and prevented the carrying out of his plans. He is now under indictment in other states and four of his banks have been closed.

In an attempt to prevent control of banks in this manner the legislature several years ago incorporated into the law a provision providing that directors must be residents of Wisconsin. This provision has been ineffective. The controlling corporation will assign a few shares, possibly one share apiece to residents of Wisconsin and ask them to permit the use of their names as directors. The management is under the controlling corporation. The directors have little or no financial interests in the bank. The officers do not feel that they should perform the duties expected of them under the law. They are directors in name only. The orders come from the controlling corporation.

The remedy is hard to find. Possibly a law requiring that at least a majority of the shares should be owned by residents of Wisconsin and by individuals rather than by corporations might be a safeguard. The matter is one for the careful consideration of the people and their representatives in the legislature.

If branch banking is undesirable and is a danger the chain banking

system is tenfold more so.—[Wisconsin, Annual Report of the Commissioner of Banking, 1922.]

(a) Wherein does chain banking differ essentially from branch banking? (b) What are the dangers which are referred to in the above statement? (c) What are the difficulties of management and supervision? (d) Why has such a method grown up in this country?

764. Extent of Chain Banking

Chain banking is not limited to any particular geographical section of the country. On the contrary it is widely scattered in different states. There are not more than one or two federal reserve districts in which chain banking does not exist, or has not heretofore existed, in some form. The extent of chain banking varies widely in different states, some state authorities and officials of the federal reserve banks maintaining that they have found no such practice within certain states. Two or three federal reserve banks state that there is none or only a very limited amount within their respective districts. Even some states which freely admit that chain banking exists state that the proportion of chain banks to the system as a whole is small.

In Texas it has had considerable growth, being termed "group banking." Another section in which there has been an important development is that of the so-called middle west in Illinois and Iowa. The growth in Iowa has been probably less marked than in the northwest, or in Georgia and Florida. It is believed that it has attained a fairly high degree of development in the territory surrounding Chicago.

Chain banking is likewise found in some chief branch banking states. Several small chains have been reported as existing in California and sundry other far western states. It exists also in Georgia, a branch banking state. Branch banking does not, therefore, prevent or crowd out chain banking altogether. One effect, however, has been that of preventing the chains from becoming as large and powerful, except in Georgia. Many large bankers naturally prefer branch banking to chain banking if the state laws permit them to establish branches. On the other hand, it is reported that there have developed some large chains in the South, one in particular with headquarters in Georgia, a state which permits state-wide branch banking. It should be added also that chain banking knows no such things as state or political boundary lines. They may, and often do, extend through several states. It is not uncommon for a chain of banks to reach out into different federal reserve districts involving both state and national banks.

(a) How do you account for the fact that chain banking has developed in certain localities? (b) Why have the various chains consisted largely with small banks? (c) From the foregoing statement do you think that chain banking has developed principally in those states where branch banking exists? Explain. (d) Would you expect to find extensive banking chains in New York City or Philadelphia? Why?

CHAPTER XXV

MONEY, CREDIT AND PRICES

765. Variations in the Velocity of Bank Deposits

Increases in January in various phases of business and financial activity were accompanied by a considerable increase in the velocity of bank deposits, or rate at which funds are checked out of banks, says the Federal Reserve Bank of New York in its March 1 "Monthly Review," which adds:

"In the last six months of 1924 the rate of turnover of bank funds in 140 centres outside of New York fell approximately 8% below the average of the past six years, a factor which tended to limit the effects of the large expansion of deposits upon prices and general business activity. The increase in velocity in January, accompanied by a further increase in bank deposits, resulted in larger total of check payments, or debits to individual deposits, than in any previous month."

The bank presents a diagram which shows in percentages of the six-year average the changes in the rate of turnover for 140 centres outside of New York and compares this with the rate in New York City, which was at a relatively high level during most of last year, reflecting, partly, activity in the security markets.—[*Commercial and Financial Chronicle,* March 7, 1925, reprinted by permission.]

(a) Why and how does the velocity of deposits affect the price level and general business? (b) Which is cause and which effect: "the increase in velocity," "the increase in deposits," "the larger check payments," "the activity of the security market"? (c) What are the reasons why the velocity of deposits is higher in New York than in the 140 outside centers?

766. The Natural Trend of Prices

I. The *natural* trend of commodity prices is downward. Improved methods of transportation, fabrication, and distribution gradually cheapen the cost and consequently the selling prices of commodities generally. There will be temporary exceptions to this rule in the case of perennial products, the supply of which may be materially decreased or diminished by climatic or other conditions, such as foodstuffs. But in the long run improved farm machinery and more scientific agricultural methods will tend to cheapen even such products.—[Thomas Gibson, in *Financial World,* 1926.]

(a) In what sense is the word "natural" used here? Is it proper to regard the introduction of machine processes as natural, but the increased production of gold as "artificial"? (b) Does "nature"

apply only to the supply side of the market? (c) Does Gibson's theorem agree with the principle of diminishing returns in extractive industries? with the quantity theory of money? with Fisher's equation $MV+M'V'=PT$?

II. Basis of Value:

> When you have nothing else to wear
> But cloth of gold and satins rare,
> For cloth of gold you cease to care—
> Up goes the price of shoddy.

(a) How far is this an adequate theory of value?

767. The Stabilized Bond

Taking the Gamble Out of Business

The way having been shown, other stabilized bonds are likely to follow, as other companies note the advantages to be gained. Mr. Rand hopes that the stabilized bonds may mark an epoch in financing methods. Both Mr. Rand and I have an ambition to help "take the gamble out of business," and this bond represents merely one of many ways to further that end.

The investment world is just beginning to realize that an ordinary bond is not the safe, sane and stable thing which from time immemorial it has been believed to be. On the contrary, the experience with bonds during the last half century has disabused many investors' minds of the idea that gilt-edged bonds afford an income stable in purchasing power. If ordinary bonds might be said to afford a stable income in name, they certainly do not in fact. . . .

But a still better way to serve the would-be-safe investor is through the stabilized bond. The fundamental peculiarity of a stabilized bond is that the sums due under it are fixed not in dollars but in purchasing power, the number of dollars due from time to time being found through an index number of prices. This index number of prices tells us, at any date, how high or low prices, on the average, then are as compared with prices in 1913. As is well known, such index numbers are published monthly by the U. S. Bureau of Labor Statistics, by Dun's, by Bradstreet's and many other agencies, while weekly index numbers are published by the Harvard Committee on Economic Research in their weekly letter and by myself in the daily press.

Through this device, that of the index number, the instability of bonds is revealed. For instance, a bondholder whose income in the pre-war 1913 was $10,000, if he had received $10,000 a year regularly since 1865, would not really be having a steady income, but an income equivalent in pre-war, i.e., 1913, value to $4,000 in 1865, $15,000 in 1896, $4,000 in 1920 and $6,300 in 1925. . . .

We sometimes hear it said "that there is nothing new under the sun." It might be claimed, in corroboration of this aphorism, that the Rand Kardex Company was long ago anticipated by the Colony of Mass. Twice, once in 1747 and again in 1780, a tabular standard was created by law for the payment of soldiers and others as a means of combating the extreme uncertainty and depreciation of paper money.

The latter law lasted until 1786, when the extreme need of such a corrective was over. The correction was based on what might be called a crude index number of commodities. The State issued its note on this basis.

"Both Principal and Interest to be paid in the then current Money of said State, in a greater or less Sum, according as Five Bushels of Corn, Sixty-eight pounds and four-seventh parts of a pound of beef, ten pounds of sheep's wool and Sixteen pounds of Sole Leather shall then cost, more or less than One Hundred and Thirty Pounds current money, at the then current prices of the said articles." The same principle was applied to the payment of sums due the President of Harvard College.

The following is a copy of the stabilized bond referred to:

UNITED STATES OF AMERICA
State of Delaware

No. M $1,000,000

RAND KARDEX COMPANY, INC.

Seven Per Cent. Thirty Year Stabilized Debenture Bonds
Registered and Safeguarded as to purchasing power of both principal and interest

RAND KARDEX COMPANY, INC., a Delaware Corporation, hereinafter termed the "company," for value received, hereby promises to pay to the registered holder hereof on the first day of July, 1955, at the principal office of the Buffalo Trust Company, in the City of Buffalo, State of New York, such sum of money as shall possess the present purchasing power of One thousand dollars ($1,000.00) with interest thereon at the rate of seven per cent. per annum, payable quarterly on January first, April first, July first and October first, in such sums as shall, at the respective times of payment, equal in purchasing power One and seventy-five one hundredths per cent. (1.75%) of said purchasing power of One thousand dollars (1,000.00), all to be based upon an index number of the prices of commodities defined and fixed in accordance with the amplified statement below.

The Company declares that it is its intention, by this obligation, to afford the holder hereof a steadier income in terms of real purchasing power than that obtainable from any other form of obligation, by providing herein for the increase or decrease of the sums of money payable hereunder when the purchasing power of the dollar falls or rises, in the sense that the index number of the prices of commodities rises or falls.

This bond is one of a duly authorized issue of bonds of the Company known as its "Seven Per Cent. Thirty Year Stabilized Debenture Bonds" (hereinafter referred to as the "bonds") limited to the aggregate principal amount of Five hundred thousand dollars ($500,000.00) in present purchasing power, issued and to be issued under a trust indenture dated July 1, 1925, (hereinafter called the "indenture") duly executed by the Company to the Buffalo Trust Company, of Buffalo, N. Y., as Trustee (hereinafter called "Trustee"), to which indenture and indentures, if any, supplemental thereto, reference is hereby made for a statement of the rights and remedies of the holder hereof.

Subject to the provisions for registration hereof this bond is intended to have, to the extent permitted by law, all the characteristics of a negotiable instrument, and the principal and interest will be paid without regard

to any equities between the Company and the original or any intermediate registered holder or holders hereof.

At the option of the company all of said bonds, or any part thereof, may be redeemed on any quarterly interest payment day prior to maturity, upon at least sixty (60) days notice in writing to the registered holder hereof, as provided in said indenture, at the principal amount and accrued interest, together with a premium of three per cent. (3%) of the principal amount if redeemed on or before July 1st, 1935; or with a premium of two per cent. (2%) of the principal amount if redeemed after July 1st, 1935 and on or before July 1st, 1945; or with a premium of one per cent. (1%) of the principal amount if redeemed after July 1st, 1945 and on or before April 1st, 1955. The amount to be paid upon any such redemption, both as to principal and interest, shall be determined in accordance with the provisions hereof in respect to the fixing of the payments to be made in accordance with the purchasing power of the dollar at the time of payment. If less than the total number of bonds issued and outstanding under said indenture are to be redeemed as aforesaid, the particular bond or bonds so to be redeemed may be determined by the Board of Directors of the company.

In case of certain defaults specified in said indenture, this bond and all other bonds of this issue may be declared and may become due and payable in the manner and with the effect provided in said indenture.

This bond is transferable only by the registered owner in person or by his duty authorized attorney, upon the books of the Company, maintained and kept for that purpose at the principal office of the Trustee in the City of Buffalo, N. Y.

No recourse shall be had for the payment of the principal of, or interest on, this bond, or for any claim based thereon, or otherwise, in respect thereof, or of said indenture against any incorporator, stockholder, officer or director, past, present or future, of the company, or of any successor corporation, whether by virtue of any constitution, statute or rule of law or equity, or by the enforcement of any assessment or penalty or otherwise, such liability being by the acceptance hereof, and as part of the consideration of the issue hereof, expressly released.

This bond shall not become obligatory until it shall have been authenticated by the execution by the Trustee of the certificate hereon endorsed.

The United States internal revenue documentary stamps required by Act of Congress, approved November 23, 1921, have been affixed to said indenture.

Amplified Statement of Method of fixing amounts to be paid as principal and interest hereunder.

The index number of the prices of commodities employed hereunder shall be the well known index number of wholesale prices of the United States Bureau of Labor Statistics as published each month, subject to such modifications and amplifications and changes of method in making and computing the same as shall, or may be made, by said bureau from time to time.

If as of any due date, the index number of the prices of commodities shall remain at approximately the present level, that is to say, if it does not rise or fall as much as one-tenth part of the level fixed as of July 1, 1925, i. e. 157.5, then the amount to be paid as principal shall be One thousand

dollars ($1,000.00); and the amount to be paid as interest on any quarterly interest date shall be Seventeen dollars and fifty cents ($17.50).

In case the index number as of any due date shall be found to be more or less than that fixed for July 1, 1925, by as much as one-tenth part of said index number of July 1, 1925, then for every full one-tenth rise or fall of said index number, there shall be added or subtracted respectively one-tenth of the payment then due, said one-tenth being $1.75 for any quarterly payment of interest and $100.00 for the principal sum.

The index number measuring the present price level as of July 1, 1925, shall be the average of said index numbers for the three calendar months preceding July 1, 1925, which have been published on or before July 1, 1925, namely, the index-numbers for March, April and May of 1925, which average is 157.5 on the basis of 100 as representing the 1913 price level.

The index number measuring the price level as of July 1st of any other year hereunder shall be the average of the said index numbers for March, April and May of such other year, and the index number as of October 1st in any year, shall be in like manner the average of the said index numbers for the preceding June, July and August, and the index number as of January 1st in any year shall be in like manner the average of the said index numbers for the preceding September, October and November, and the index number as of April 1st in any year, shall be in like manner the average of the said index numbers for the preceding December, January and February.

Since one-tenth of the normal quarterly payment i. e., $17.50 is $1.75, and since one-tenth of 157.5 i. e., the index number as of July 1, 1925, is 15.75, the application of the foregoing principles may be illustrated by the following tabulation:

(a) The quarterly payment at any due date shall be $17.50 if the index number as of said date shall lie between 141.75 and 173.25.

(b) The quarterly payment at any due date shall be:

$19.25,	if	index	is	as	large	as	173.25,	but	not	as	large	as 189.00
21.00,	"	"	"	"	"	"	189.00,	"	"	"	"	" 204.75
22.75,	"	"	"	"	"	"	204.75,	"	"	"	"	" 220.50
24.50,	"	"	"	"	"	"	220.50,	"	"	"	"	" 236.25
26.25,	"	"	"	"	"	"	236.25,	"	"	"	"	" 252.00
28.00,	"	"	"	"	"	"	252.00,	"	"	"	"	" 267.75

and so forth for still higher price levels.

(c) The quarterly payment at any due date shall be:

$15.75,	if	index	is	as	small	as	141.75,	but	not	as	small	as 126.00
14.00,	"	"	"	"	"	"	126.00,	"	"	"	"	" 110.25
12.25,	"	"	"	"	"	"	110.25,	"	"	"	"	" 94.50
10.50,	"	"	"	"	"	"	94.50,	"	"	"	"	" 78.75
8.75,	"	"	"	"	"	"	78.75,	"	"	"	"	" 63.00
7.00,	"	"	"	"	"	"	63.00,	"	"	"	"	" 47.25

and so forth for still lower price levels.

(d) Likewise the principal sum at maturity shall be One thousand dollars ($1,000.00) if the index number as of such date of maturity shall lie between 141.75 and 173.25; it shall be Eleven hundred dollars ($1,-100.00) if the index number as of such date is as large as 173.25, but not as large as 189.00 and so forth for still higher price levels; it shall be Nine hundred dollars ($900.00), if the index number is as small as 141.75,

but not as small as 126.00 and so forth for still lower price levels. The same results would apply on redemption dates, if any, with the addition of the premiums above specified.

In case the United States Bureau of Labor statistics should discontinue the computation and publication of its said monthly index number of wholesale prices, or the publication thereof should be delayed so as to prevent its use hereunder, there shall be substituted therefor by the Trustee, as specified more fully in said indenture, such other index number or method of ascertaining changes in the price level as resembles in the opinion of the Trustee most closely the index number and method of arriving thereat of said Bureau.

Unless otherwise directed in writing by the registered holder hereof, the company will mail checks to the registered holder hereof covering the quarterly interest payments addressed in accordance with the registered holder's post office address, as it appears on the books of the company.

Certain of the provisions of the said indenture may be amended by the written consent of the Company and of the holders of eighty per cent. (80%) of the principal amount of the bonds of this issue then outstanding given in writing or at a meeting of said holders as provided in said indenture.

In Witness Whereof, the Company has caused this bond to be signed by its President, or by a Vice-President, and its corporate seal to be hereunto affixed and attested by its Secretary, or Assistant Secretary, as of the 1st day of July, 1925.

Rand Kardex Company, Inc.,
(seal) President.
Attest: By
Secretary.

[Irving Fisher, "The Stabilized Bond—A New Idea in Finance," *The Annalist,* November 13, 1925, p. 603.]

(a) What advantages were supposed to accrue from this bond to an investor that he would not have under the bonds commonly issued and sold by corporations at the present time? Would this bond be equally fair to both the borrower and lender? (b) Would this bond actually "take the gamble out of business"? (c) Does an investor lose in a period of rising prices as indicated by Fisher? Would the stabilized bond overcome that risk in investments? (d) Why is it necessary to have such wide margins in the index numbers in determining the quarterly interest payments? Should not the amount of interest vary more closely with changes in the index number? (e) Would there be any tendency for the holder to sell either in a falling or rising price level? Explain. (f) Does the Bureau of Labor Statistics Index number provide a proper means for determining changes in the price level, or would it favor some classes of investors? Explain. (g) Will the price of the Rand bond be constant? Will its value in terms of commodities and services be constant? (h) Is it logical to apply the price level corrective to payments of interest as well as of principal?

768. Relation of Quantity of Money to Its Value

I. If the authority issuing an irredeemable paper money should set a definite future date when redemption would be resumed, and if the market believed that this promise would be kept, the value of the paper money would be set by the rate of discount prevailing for the period of time that the holder of the note had to wait for his gold, and the paper money would advance in value week by week and month by month like any other discounted promissory note approaching maturity.

(a) What varying factors, under this theory, could affect the value of the paper money? How would an increase in the quantity affect its value? (b) Could a sharp increase in the volume be accompanied by a rise in the value of the paper money? (c) Would a larger volume of redeemable paper money have a higher value than a smaller volume of irredeemable paper money?

II. The value of paper money is determined by the quantity outstanding taken in conjunction with the independently determined velocity of circulation and volume of trade. The question of redemption or lack of redemption has nothing to do with it, so long as the quantity of money is unchanged. Paper does not get its value from redemption. Gold money does not get its value from the metal of which it is made. If we increase the number of dollars, whether by renaming coins, or by debasing coins, or by increasing coinage, or by any other means, prices will be increased in the same proportion. It is the number, and not the weight, that is essential.

(a) Answer the above questions under this second conception of the quantity theory of money. (b) Which of the two theories is true? Can they be harmonized? (c) Which, if either, of these theories explains why the greenbacks reached par in 1879? (1) had the "country grown up to its currency"? (2) If so, was it a fortuitous event that they reached par in 1879? (3) If the greenbacks existed in such quantity that under the quantity theory their value ought to fall below the discounted future value of the gold in which they were to be redeemed, would speculators take them out of circulation, hold them for interest, and so reduce their quantity that the value would rise to that discounted future value?

769. Basic Changes in the Demand for Gold: Their Effect on the Price Level

Mr. Goldsborough: You stated a few minutes ago, as I understood it, or indicated, that you did not agree with the majority of economists who thought we were entering a period of gradual decline in price levels. Now, would you state on what you base your view?

Prof. Lehfeldt: That is just what I want to do. May I just develop that point now? What are the reasons for thinking there may be a progressive scarcity of gold, as evidently the Genoa conference did?

The principal reason for that, it seems to me, is that various countries which were using paper money will desire to get back to a gold standard and, for that purpose, they will wish to lay in stocks of gold. Supposing, looking at it from the point of view of 1922, that all the leading countries had wanted to get back to a gold standard rapidly and more or less together, that might have resulted in a scramble for the available stock of gold.

Now, in 1926, there is not that danger, because already most of Europe has gone back to a gold standard more or less. There are really only France, Italy and Belgium left to deal with the situation. And we have seen, as a result of those four years experience, that the way in which it is being done has not resulted in any very great demand for gold.

Another possible cause: Supposing the impoverished peoples of Eastern and Southern Europe, who have been ruined by paper currency, took to buying and hoarding gold coins in order to feel they had something they could rely upon—there might be quite a strong demand for gold.

The CHAIRMAN: Similar to the demand that has existed from time to time in India?

INDIA'S ABSORBED GOLD SLIGHT PERIL TO WORLD STOCK

Prof. LEHFELDT: Yes. Well, in India, of course, there is always a demand for gold, for hoarding and for owning. Supposing that were to be extended, it might result, as I say, in an increasing demand and some scarcity of gold.

But it seems to me that any influences of that kind which one can imagine would be slow and not very extensive. They might result in a rise in the value of gold, but it could not have a very great or very abrupt rise, as I see it.

Now, look at the other side of the picture. What are the reasons why there may be an increase in the abundance of gold relatively to the world's needs?

First of all, the gold mines are at the present moment turning out more than is required for the arts; consequently there is an addition to the world's stock every year. And that, of course, in itself, in the long run, may be just about right for meeting the increase in the world's trade.

But supposing that any countries adopt more economical methods of handling their currencies; as you suggested, sir, that France should adopt the check system and would not want so much gold. Consequently there is always that possibility of any invention, so to say, for economizing in the demand for gold—the check system is one—as an influence tending to make gold redundant or unnecessary relatively.

The suggestions of the General Conference on the same line, that is to say, the head central banks, instead of keeping all reserves in gold, would keep them partly in foreign paper, that is a method of economy and not so much gold is needed.—[Prof. R. A. Lehfeldt, before Congressional Committee, 1926.]

(a) What changes should occur in the ratio of gold reserves to the liabilities of the central banks of the world and of the government treasuries for fiduciary money: (1) with the development of

international peace and security? (2) with the development of co-operation between the central banks of the leading countries? (3) with the growing use of checks instead of paper money and gold for circulation? (4) with the relative cessation of hoarding and the release of hoarded gold? (5) with the practice of central banks carrying part of their reserves in other countries invested in readily marketable paper? (b) Looked at from the point of view of demand for gold, what is to be the drift of the price level during the next decade or two?

770. Calculation of Purchasing Power Parities

Prices in June, according to Statist index number of prices for Great Britain and the Bureau of Labor Statistics index number for the United States, were as follows:

Year	United States Index	British Index	Purchasing Power Parities	Average Exchange Rates (Cables in New York)	Percentage Purchasing Power Parities Are of Exchange Rates
1917	185	216	$4.1682	$4.7543	87.67
1918	191	226	4.1127	4.7534	86.52
1919	203	235	4.2037	4.6211	90.97
1920	243	300	3.9419	3.9498	99.80
1921	142	183	3.7764	3.7815	99.87
1922	150	159	4.5911	4.4519	103.13
1923	153	150	4.9638	4.6147	107.56
1924	145	160	4.4105	4.3199	102.10

(a) The formula for calculating the purchasing power parities is the U. S. Index ÷ the British Index × par. Explain why. (b) When the ratio of the purchasing power parity to the exchange rate is below 100%, are imports into the United States stimulated or discouraged? why? (c) If the price level in the United States rises faster than the price level in England, how does it affect the purchasing power parity? (d) Why does the percentage which the purchasing power parity is of the exchange rates, whether above or below, tend to return to 100%? (e) The Federal Reserve Board index number for the United States in June is as follows: 1919, 207; 1920, 262; 1921, 143; 1922, 161; 1923, 164; 1924, 154. Sub-

stitute these figures for the Bureau of Labor Statistics figures and note the effect on the purchasing power parities. Which index is the more comparable with the British index? Which should be used in calculating the purchasing power parities? (f) The index numbers of imported and exported goods were on June 30:

	U. S. Index	British Index
1919	201	237
1920	246	388
1921	114	170
1922	144	156
1923	165	176
1924	154	175

Substitute these figures and calculate the purchasing power parities. Compare with figures found in above calculations. What reasons can be advanced for the use of these indexes in the calculation of purchasing power parities?

771. Influences of Price of Commodities on Exchange Rates

The low price of cotton will naturally ease the strain on British exchange. The pound sterling was brought back to parity not so much by increasing its worth as by cheapening the dollar. The fall in the price of cotton statistically enhances the purchasing power of the dollar, but it will not hurt sterling for the reason that cotton purchases are made abroad and not in domestic Britain. A low general cost of living in America, as compared with the cost in Britain, is harmful to the pound, but the British currency is never hurt through low prices for raw materials that Britain buys abroad. On the contrary, the situation is all in Britain's favor when one pound of rubber will purchase something more than three pounds of raw cotton.—[Whalley-Eaton Letter, October 12, 1926.]

(a) Are there any fallacies in the arguments here set forth? (b) Comment upon the following statement: "Except in Austria, Germany and The Netherlands, Switzerland and Sweden, prices in each of the European countries have reflected to an appreciable extent the movement of their exchanges, although in most instances there was a considerable lag between the movement in the exchange and the compensating adjustment in prices. . . ." Does this statement bear out the conclusion drawn in (a)? Explain.

772. Conversion of Prices on Paper Money Basis to Prices on Gold Basis

Using average monthly wholesale prices of 1913 as base, the following percentage index represents the prices of England on June 30:

Year	On Paper Currency Basis	Converted to Gold Basis	Average Monthly Exchange Rates N. Y. on London
1913	99		4.872
1914	95		4.884
1915	125	123	4.774
1916	154	151	4.758
1917	216	211	4.754
1918	226	221	4.753
1919	235	223	4.621
1920	300	243	3.950
1921	183	142	3.782
1922	159	145	4.452
1923	150	142	4.615
1924	160	142	4.320

For the years of inconvertibility (1915-24) the index numbers have been converted to a gold basis by applying to them the percentage which the corresponding average monthly exchange rates for dollars are of par.

(a) Show by numerical example how this calculation is made. (b) This calculation assumes that the price level in England rose in proportion to the decline in exchange in New York on London: is this a tenable assumption? Suppose the former rose more slowly than the latter fell, how would it affect the converted prices?

773. Proposal for Emergency Currency

If the Treasury of the United States could hold in reserve a certain amount of legal tender notes in excess of the amount of money in regular circulation, to be advanced to banking institutions at a specified rate of interest upon the deposit of United States bonds as collateral security, a source of relief would be established which would effectually prevent a monetary pressure from being carried to any extent.—[Annual Report of the Comptroller of the Currency, 1868, p. XXVII.]

(a) What is the essential reason why the national bank note scheme did not provide for emergency circulation? (b) How did the above plan differ from the plan adopted under the Aldrich-Vreeland Act in 1907? (c) Which is the better plan, to have the notes issued by the government—be promises of the government and extended by the government itself, or to have the notes issued by the national banks grouped in a currency association—be promises of the banks to pay?

774. Nature of Relief from Low Prices in Agriculture

The legislative measures proposed for the relief of the farmer are usually economic monstrosities. Any plan having for its basis price valorization is unsound. If the Congress had passed any of the proposed bills which called upon the Government to purchase the surplus supply of wheat at a fixed price they would have fallen into a profound error. The inevitable result would have been a great increase in wheat production and the taxing of the public generally in order to pay a class for a commodity which would pile up and deteriorate in such a way as to rapidly decrease its value. The only intelligent measures ever proposed for the benefit of the farmer are the plans for the gradual and scientific marketing of products instead of throwing them into competitive markets in a few weeks. An efficient organization of this kind would be a good thing for all concerned.—[Thomas Gibson, in *Financial World,* June 26, 1926.]

(a) Why were agricultural prices depressed further and why did they stay lower longer than manufactures' prices in the 1921-2 depression? (b) In what way was each of the following bills introduced into Congress supposed to help the agricultural situation: (1) the "Edge Corporations" Act; (2) the Federal Intermediate Credits Act; (3) the Debt Settlement acts; (4) the Haugen-McNary bill; (5) the Fess-Tincher bill? Criticize these proposals.

775. Degrees of Deflation

I. The following table shows the wholesale price index numbers for the latest month of 1924 for which figures are available for 20 different countries:

South Africa (Oct.)	133	Dutch East Indies (July)	174
Egypt (Sept.)	148	British India (Sept.)	179
United States (Sept.)	149	New Zealand (August)	181
Canada (Sept.)	154	Spain (Sept.)	184
Netherlands (Sept.)	159	Japan (Sept.)	206
Switzerland (Oct.)	160	Denmark (Sept.)	234
Australia (Sept.)	162	Norway (Sept.)	275
Sweden (Sept.)	163	France (Sept.)	486
United Kingdom (Sept.)		Belgium (Sept.)	550
(Board of Trade)	167	Italy (Sept.)	580
(*Statist*)	166	Czechoslovakia (Sept.)	997

South Africa, it will be noted, leads the list;

The best evidence available, therefore, seems to show that South Africa's currency is already deflated, not only to the gold standard level, but probably somewhat below.—[From Report of South African Gold Standard Commission, 1925. See Federal Reserve Bulletin, March 1925, p. 174.]

(a) Is this a warrantable conclusion from the data given?

II. Effects of Inflation and Deflation: A news item from Berlin, dated November 2, 1924, states that the Hamburg-American Line has decided to scale down its capital in the ratio of ten paper

marks to three in gold. The Deutsche Werke has scaled down in the ratio of 25 to 1, but, on the other hand, the Harpender Steel Corporation decided not to scale down at all.

(a) What were the occasion and purposes of such actions?

776. Effect of Change of Price Level on War Borrowings

The essential facts about the war borrowings are given in the following table:

Loans	Amount (billions)	Subscription Period	Date of Bonds	Dates of Permitted Instalments
First Liberty	$2.0	June 15	June 15, 1917	Date of application; and June 28, July 30, Aug. 15, Aug. 30.
Second Liberty	3.8	Oct. 1–27	Nov. 15, 1917	Nov. 15, Dec. 15, Jan. 15.
Third Liberty	4.2	Apr. 6–May 4	May 9, 1918	May 28, July 18, Aug. 15
Fourth Liberty	7.0	Sept. 28–Oct. 19	Oct. 24, 1918	Nov. 21, Dec. 19, Jan. 16, Jan. 30.
Victory	4.5	May 10–20	May 20, 1919	July 15, Aug. 12, Sept. 9, Oct. 7, Nov. 11.

The index number of wholesale commodity prices computed by the Bureau of Labor Statistics is presented below.

(1913=100)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1917	153	157	162	173	183	185	188	189	187	183	183	182
1918	184	186	187	190	190	191	196	200	204	202	203	202
1919	199	193	196	199	202	203	212	216	210	211	217	223
1920	233	232	234	245	247	243	241	231	226	211	196	179
1921	170	160	155	148	145	142	141	142	141	142	141	140
1922	138	141	142	143	148	150	155	155	153	154	156	156
1923	156	157	159	159	156	153	151	150	154	153	152	151
1924	151	152	150	148	147	144.6	147.0	149.7	148.8	151.9	152.7	157.0
1925	160.0	160.6	161.0	156.2	155.2	157.4	159.9	160.4	159.7	157.6	157.7	156.2
1926	156.0	155.0	151.5	151.1	151.7	152.3	150.7					

The simple arithmetic average of the monthly averages of the price level from June 1917, to May 1919, is 192.5% of the year 1913. Using this figure as 100, the figure for July 1926 was 78.3. That is, the price level the last month was 21.7% lower than it was on an average during the period of borrowing.

(a) How much more in purchasing power would the government be paying back to bond holders than it borrowed, if it were to have liquidated its whole war debt in July, 1926?

(b) A refinement of the above rough calculation could be made by making what changes for the fact that (1) the issues of certificates of indebtedness in anticipation of payments of subscriptions to loans really set the date of borrowing earlier than the date of the bond? (2) the date of the subscription is better than the date of the bond for the purpose, because it represents the date when the government received the funds from the lenders? (3) payments by installments were allowed?

(c) A better statement is to consider the change of price level since the issue of each loan. The index of prices at the time of subscription of each loan, and the change of price level to July 1926, were as follows:

Loan	Date of Subscription	Index as of Date of Subscription	Index of July 1926	Ratio of Figure for July 1926, to Figure for Subscription Date
First Liberty.....	June 1917	185	150.7	81.5
Second Liberty.....	October 1917	183	150.7	82.3
Third Liberty.....	May 1918	190	150.7	79.4
Fourth Liberty.....	October 1918	202	150.7	74.6
Victory.....	May 1919	202	150.7	74.6

On which loan does it appear that the government would suffer the greatest loss of purchasing power if it were to have liquidated the whole debt in July, 1926?

(d) Since the loans were of decidedly different amounts the change of average price level ought to take this factor into consideration, by using a weighted average. The average price level at times of subscription, weighted according to the size of the loan, and calculated by arithmetic average, is 195. The index for July 1926, namely, 150.7, is 77% of 195; that is, prices were 23% lower in July 1926 than they were, on the average, at the time of subscription to the loans. Why did the introduction of weighting into the calculation show a greater change of purchasing power?

(e) The interest bearing debt on June 30 in recent years, together with the average price index of the year, and the amount of decrease of debt during the fiscal year ending June 30, is shown on the following page.

Using the annual average price level for the years when each respective debt reduction was made, and using the reductions as

Year	Price Index (fiscal years)	Debt (millions)	Decrease (millions)
1919	...	$26,596 (Aug. 31)	.....
1920	227	24,061	$2,535
1921	184	23,737	324
1922	142	22,711	1,026
1923	156	22,007	704
1924	150	20,981	1,026
1925	155	20,210	771
1926	156	19,384	826

weights, the weighted arithmetic average price level at which the debt payments were made was 179% of the level of 1913. Above it was found that the price level at the time of issue of the loans was 195% of the price level of 1913. 179 is 92% of 195. That is, the average commodity price level at which the payments were made was 92% of the level at which the loans were contracted, and the purchasing power of the dollar was at the latter period 109% of what it was in the former. If the price level continues to fall in the future, do the bondholders gain or lose by the fall? Does this argue for a policy of speedy debt payment by the government?

(f) The weighted index number [prepared by the Aldrich Committee—Senate Report, No. 1394, Part I, 52nd Congress, 2nd Session, 1893, page 9] of wholesale prices of 223 articles in common use, with the year 1860 as a base and with prices of January usually used, is given in the following table, together with the amount of the interest bearing debt as of July 1st and the increase or decrease of the debt during the fiscal year ending July 1st.

The public debt reached its lowest figure in 1892.

Since the amount of the public debt is given as of July 1st, and the price index is of prices as of January 1st, the increase or decrease of debt during the fiscal year ending June 30 may be assumed for the purposes of the following rough calculations to be distributed equally on either side of January 1. Also the period 1874 to 1880 inclusive may be thrown out inasmuch as the decreases and increases during the time about offset one another.

(1) Calculate the average price level at which the increases of Civil War debt occurred, using the increases as weights. (2) Calculate the average price level at which the Civil War debt payments up to 1892 were made, using the decreases as weights. (3) If it be found that the average price level at which the Civil War debt increases took place was 184% of the price level in 1860, and the

Year	Price Index (1860 = 100%)	Debt (millions)	Debt Increase or decrease (millions)
1860	100.0	$ 65	$ 0
1861	94.1	90	+ 25
1862	104.1	365	+ 275
1863	132.2	708	+ 343
1864	172.1	1,360	+ 652
1865	232.2	2,221	+ 1,022 to Aug. 31
		2,382 Aug. 31	
1866	187.7	2,332	− 50 since Aug. 31
1867	165.8	2,248	− 84
1868	173.9	2,202	− 46
1869	152.3	2,162	− 40
1870	144.4	2,046	− 116
1871	136.1	1,935	− 111
1872	132.4	1,815	− 120
1873	129.0	1,710	− 105
1874	129.9	1,739	+ 29
1875	128.9	1,723	− 16
1876	122.6	1,711	− 12
1877	113.6	1,712	+ 1
1878	104.6	1,794	+ 82
1879	95.0	1,798	+ 4
1880	104.9	1,724	− 74
1881	108.4	1,640	− 84
1882	109.1	1,464	− 176
1883	106.6	1,338	− 126
1884	102.6	1,226	− 112
1885	93.3	1,196	− 30
1886	93.4	1,146	− 50
1887	94.5	1,022	− 124
1888	96.2	951	− 71
1889	98.5	830	− 121
1890	93.7	725	− 105
1891	94.4	611	− 114
1892	91.3	585	− 26

average price level at which the Civil War debt payments were made was 117.5% of the price level of 1860, what ratio did the price level when the debts were paid bear to the level when the debts were contracted, and what was the ratio of the purchasing power of the dollar at the two periods?

777. Effect of Inflation on Governmental Revenues and Expenditures

I. French expenditures do not rise as fast as French revenues with the decline in the franc. The reasons are: (1) that of the expenditures 53% is for service on the internal debt, including pensions, and is fixed in francs; (2) that of the revenues, there is

a great automatic increase with the decline of the franc, since so large a part of French revenues comes from indirect taxes and fiscal monopolies.

II. In Germany, revenues lagged behind expenditures when the mark currency was inflated; the reasons were: (1) Germany relied primarily on direct taxes, payable in a given year, on the basis of valuations of the preceding year.

(a) Develop these arguments, and trace their effect on budget deficits and banknote issues.

778. Effects of Monetary Inflation on the Economic Situation of France

. . . . This large and continuous rise of internal prices is the pivot around which all the other phenomena of our economic life revolve—rising wages and constant strikes or threats of strikes; troubles in the civil service; rises (belated and insufficient) in railway rates; rising rates of interest; falls in fixed-interest bearing securities and even in stocks with variable dividends; a growing gap between the rents of new and "Rent Restriction" houses, with depreciation in the capital values of the latter, etc. Among other results is an arbitrary redistribution of fortunes and incomes. Wealth no longer bears any relation to effort or to saving. These results have been aggravated by exceptional legislation, moratoria, export prohibitions, Customs "co-efficients" bearing unequally on different trades, etc.

True, production has not diminished, though building shows signs now of contraction; but its distribution has ceased to be normal. Our favorable trade balance is only a temporary result of the advantage given to French goods in foreign markets by our adverse exchange. For instance, gold prices of the products of the metallurgical industry f. o. b. Antwerp, are below those of 1913, despite the rise in world prices. On the other hand, the value per unit of weight of imported raw materials has *risen* 37%, while that of exported French manufactures has *fallen* 25%. Increased exports of French goods are paying for equal or diminished imports of foreign goods. If the cheap purchases made in France by foreigners are taken into account, it is clear that France is actually giving more to the foreigner in return for less. The nominal rise in profits hides this fact from our export industries; the others are suffering from increasing difficulties, chief among them being the notorious dearth of new capital available on the market.

Saving is ceasing. The progress of life insurance business has been checked. In 1924-5 the total sum assured increased by only 8 per cent., against 40% in 1923-4; and if this increase is translated into gold values, it is actually a decline. Accident insurance is the only form that is developing *pro rata* with the number of accidents. But insurance is only a secondary form of saving compared with direct investment, which has seriously declined. New industrial share issues have fallen off; in 1925 they totalled only 1 milliard, against 3 milliards in 1923. Some undertakings, deceived by nominal profits, have tied up their resources in extensions which threaten to crush them later on; others, e.g., the electrical industry, either cannot get the funds they require, or only at a prohibitive 10-12%. If they are driven to seek foreign capital at a lower rate, they

ought not to be prevented. New capital issues, as a whole, fell from 3,600 millions in 1924 to 2,600 millions in 1925.

Short-term money, on the other hand, is easy. Uncertainty makes everyone want to have his assets liquid. The deposits of the four big banks have gone up by 5 milliards; those of all banks by 10 to 12 milliards, and those of the savings banks by 2 milliards.

The attitude of our public authorities in this pathological situation has been arbitrary and blind. The Government has, it is true, abandoned its pernicious fiction of the identity of gold and paper, and has issued a loan at a guaranteed exchange rate; but it continues to oppose any such action by individuals, and it remains practically impossible to insert in contracts a stipulation for the employment of gold-loan coupons. Yet, while the Government still refuses to return frankly to gold—which is the only real, because it is the only international standard—the public is adapting itself to the real position. The pressure of daily needs is actually making a new stable standard. More and more, sellers are inserting in contracts a right to vary the terms in accordance with the foreign exchange, and making their prices conditional on payment in cash—[*The Economist,* July 3, 1926, quoting Prof. Rist.]

(a) Take up this quotation clause by clause and explain how inflation effects each phase of the situation.

779. Phenomena of Inflation in 1926 in France

While the franc has fallen to new low points and one distraught finance minister after another has failed to balance the budget, French business and industrial conditions have been exceedingly prosperous, although the French government has each year accumulated a huge deficit to add to the already staggering load of public indebtedness and has been compelled to resort to bank note inflation in order to meet current expenses, French industry has increased its production above the pre-war level and French business has enjoyed a greater volume of business than in 1913. From an industrial and business point of view, France is apparently the most prosperous nation in Europe, while England has been suffering from a protracted period of unemployment and Germany has been undergoing a severe industrial depression, French workers have been fully employed and French business men have been enjoying high profits. The devastated areas have practically been restored and the newly acquired resources of Alsace and Lorraine are being rapidly developed. For the past two years France has had a favorable balance of international trade for the first time in her recent history—although agricultural production is slightly below the pre-war level, exchange and currency conditions have operated in such a manner as to bring high prices and unusual prosperity to the French peasants. This prosperity has enabled the peasants to pay off a large part of their mortgage indebtedness.—[Foreign Policy Association Information Service, July 21, 1926.]

(a) Go through this citation, sentence by sentence, and explain how inflation works the result described. (b) Why is it so difficult to balance the budget? (c) What political difficulty arises when a finance minister attempts stabilization or deflation?

780. Effect of Abandonment of the Gold Standard

Suppose the countries of the world were to abandon the gold standard and stay on a paper standard, the United States alone remaining on the gold standard:

(a) The present value of gold would fall, the price level in the United States would rise: give the reasoning. (b) Foreign exchange rates would be unstable: give the reasoning. (c) The price level in the United States would be unstable, due to reduced demand for gold and the less ability of gold currency system to absorb changes of value in the metal. Explain. (d) The United States as a holder of much gold would lose heavily. Why? (e) The gold debt to European countries to the United States would be much reduced. Why?

781. Devaluation of Currencies

The wholesale price levels of the countries named were about June 30th as follows:

Year	Great Britain		France		Germany	
	On Paper Basis	Converted* to Gold Basis	On Paper Basis	Converted* to Gold Basis	On Paper Basis	Converted* to Gold Basis
1913	99	...	...	.....	....	...
1914	95	...	101	107.34	99	99
1915	125	123	142	131.03	139	120
1916	154	151	186	162.95	152	120
1917	216	211	268	241.74	165	98
1918	226	221	329	298.47	209	164
1919	235	223	329	266.92	308	92
1920	300	243	493	202.41	1,380	148
1921	183	142	325	135.96	1,370	83
1922	159	145	325	147.59	7,030	94
1923	150	142	409	133.58	1,938,500	81
1924	160	142	465	126.56	115,900 million	114

*On basis of average monthly exchange rates.

(a) As among the countries, compare the relative degrees of increase of prices (1) on the paper basis, (2) on the gold basis. (b) In order to go back to a gold basis, approximately what reduction of prices will be necessary in each country, provided the standard coin be not changed in weight? (c) What financial and economic distresses would arise during this period of price level reduction? Which country would be most distressed by the deflation? As between debtors and creditors what justice would there be in such

deflation? (d) Suppose France should reduce the weight of the standard franc to 126.56/465 of its 1924 weight, and resume specie payments on that basis, what effect would it have on the price level? on the rate of exchange in New York on Paris? Is it repudiation? (e) In case of a return to the gold basis by way of devaluation of the standard coin, how should the government proceed to determine the proper weight of the new standard coin? Consider the following bases of calculation: (1) exchange rates on gold standard countries; (2) the value expressed in the purchasing power parity of the paper unit with a gold unit; and (3) comparison of the gold value of the total circulation divided by the number of currency units, with the total gold value of the circulation in normal times divided by the number of units at that time. (f) What did Germany do in this respect in 1924? Having determined the proper gold value, how does a country proceed to put the gold basis into effect? (g) What is the political objection to devaluation of the currency? (h) As a preliminary for devaluation, why is it best to stabilize the purchasing power of a unit of the currency in relation to the purchasing power of a unit of gold? (i) Can depreciation of the currency unit at home be prevented by holding down, by government restrictions, the exchange rates on gold countries?

782. Fallacies Regarding the Gold Standard

Show that the following propositions in regard to restoration of the gold standard in France are fallacious: (a) That the restoration of the gold standard should be the last step in the process of financial reorganization. (b) That the gold standard cannot be established until the foreign trade balance, including both visible and invisible items, is favorable. (c) That if gold payments are resumed, the gold reserves will be dissipated and will leave the country. (d) That the resumption of gold payments will cause a period of business depression. (e) That one country cannot stabilize until its neighbors do. (f) That when exchange rates start rising, the sale of currency for gold and gold exchange will lead to undue expansion of bank notes and rising price level. [See Chase Econ. Bul., June 21, 1926, p. 13, B. M. Anderson, Chase National Bank, New York, by permission.]

783. Factors Determining Proper New Gold Par

The new par of the franc should be set with reference to the following four factors: (1) The ratio of the gold reserves to the notes of the Bank of France, (2) The relation of French prices in paper money to the level of gold prices in the world outside, (3) current and recent exchange rates, (4) most important, the relation of the public debt to the total

national wealth of France.—[Chase Econ. Bul. June 21, 1926, p. 10; B. M. Anderson, Chase National Bank, New York, by permission.]

(a) Given the following data, determine the proper new par:

1. Bank of France has a 41% reserve ratio on the basis of a 4-cent franc.
2. The franc rate of exchange in New York on June 15, 1926, was $0.0363.
3. The national wealth, 300 billion gold francs, old par; internal debt, 23 billion gold francs (assuming the expected reductions through pending debt settlements); debt to bear a ratio of 25% to national wealth.
4. French price level at end of May stood 702% of 1913 prices, and average price in the more stable countries of United States, Great Britain, Sweden, Holland, Switzerland stood around 148% of 1913 prices.
5. The new par should permit some further slight increase of French prices rather than cause immediate decline.

784. Factors Favorable to Resumption of Specie Payments

The Commission listed the following as factors favorable to resumption in the near future:

1. The South African pound, for over two months, as measured by the banks' telegraphic transfer rates on London, taken in conjunction with the dollar rate on London, has been within 2% of gold parity.
2. Index numbers of wholesale prices in 20 leading countries indicate that the wholesale price level of South Africa is lower in relation to the price level immediately preceding the war than is the price level in any other country of the world for which we have comparable statistics.
3. South Africa's gold position is strong, because (a) the Reserve Bank has a reserve of 64% against its outstanding notes and deposits combined; (b) the two principal commercial banks in South Africa are holding heavy sterling balances in London; (c) South African mints have a capacity to meet the probable demand for coinage; (d) South Africa is the premier gold-producing state of the world.
4. The past year has been one of prosperity for her gold mines and agriculture.—[From Report of South African Gold Standard Commission, 1925. See Federal Reserve Bulletin; March, 1925, p. 172.]

(a) Show why each factor is regarded favorable to the resumption of specie payments.

785. Fisher's Scheme of the "Compensated Dollar"

Under the scheme advocated by Professor Irving Fisher for stabilizing the purchasing power of the dollar, the following measures would be taken:

1. The substitution of gold certificates for the gold coins in circulation.
2. The reduction of the weight of the pure gold in the gold coins by some amount, perhaps a half.
3. The variation of the amount of pure gold in the bullion dollar in proportion to changes in the general price level as evidenced by an index number.
4. Perfect freedom of the holder of gold coins or certificates to exchange them for gold bullion, or of the holder of gold bullion to exchange it for gold coins or certificates.

(a) Explain the reason for each of the above provisions. (b) Show why the scheme would theoretically stabilize the purchasing power of the dollar. (c) Why would a monthly adjustment of the weight of the bullion dollar be better than an annual or even a quarterly adjustment? (d) Why should some maximum change of weight of bullion dollar at any one adjustment period be fixed upon, and why should this maximum change not be greater than the brassage charge imposed for coining a dollar. (e) Show that the fixing of such a limitation of the possible adjustment of the weight of the bullion dollar might not, in time of rapid price change, allow full immediate rectification of purchasing power of the dollar, but would not prevent the full rectification within a short time. (f) Is this a scheme of changing the mint price of gold, or of changing the seigniorage, or both? (g) Would the scheme prevent the price of wheat from falling or rising out of line with general prices? Would the scheme correct regional differences in prices? Would the scheme equalize prices in different countries that traded with one another? (h) Could the United States adopt it alone, or would it be necessary for an international adoption? Would its adoption by the United States alone affect the international flow of gold and the foreign exchange rates? Could a system of gold exchange standard be operated in connection with the system? (i) Is the Fisher scheme a "multiple commodity standard"? (j) What political difficulties are likely to arise either preventing its adoption or defeating its continuance? (k) Should the index number used be of retail or wholesale prices?

786. Plan to Stabilize the Price Level

Mr. Burtness. Under leave to extend my remarks, I attach a brief sketch of the bill H. R. 124, and also a sample of the proposed weekly bulletin, showing schedule and daily adjustments, a publicity safeguard against fraud and error:

Sketch of the Bill

SECTION 1

Since, if fixed in weight, the gold dollar with its paper and credit proxies will be unstable in buying power, this bill makes the dollar subject to weight adjustment by the guidance of an accurate gauge of the wholesale price level.

SECTION 2

Monetary standard division created. Duties, to collect trade and price data, compute the market gauge daily, and adjust the weight of the bullion dollar thereby. Quarterly reports of sales by all firms selling goods at wholesale.

SECTION 3

Construction of the market gauge schedule. All goods on the wholesale market are included, each weighted according to its market importance.

SECTION 4

Daily collection of price data in wholesale markets by M. S. D. agents. Prices are telegraphed to the M. S. D. Few prices change daily. Their collection and the calculation of the mint rate for the day involve less work than the collection and handling of daily weather reports.

SECTIONS 5 AND 6

Metric weights used. Weight of the bullion dollar adjusted at 2 a. m. daily. The new mint rate is effective at once, before the mint and the markets open for the day. This bars overnight speculation. M. S. D. bulletin showing all adjustments issued weekly, a publicity safeguard.

SECTION 7

Gold coin and silver dollars retired. All gold and all silver (except minor silver coins) to be minted into bars marked with their weight in grams and milligrams. Minor silver coins have long been weighed in grams. Gold in foreign-trade settlements always goes by weight.

SECTION 8

All United States currency to be replaced by a new issue of legal-tender Treasury notes redeemable on demand.

SECTION 9

Treasury notes are given 100 per cent backing. Half of this is specie, four-fifths of which must be gold and one-fifth of which may be silver at its current market price reckoned in gold. The other half is interest-bearing United States bonds, which may be sold as needed to keep the specie reserve at 50 per cent of the notes outstanding. In case the specie exceeds 55 per cent, with general prices tending to decline, additional notes will be issued to equal such excess and bonds purchased therewith.

SECTION 10

Free coinage of gold. Treasury authorized to purchase silver on the market as needed for auxiliary redemption use.

SECTION 11

Treasury notes are redeemable on demand in gold bullion at the current mint rate or, at the option of the applicant, in silver at its current market

price. In emergencies the Treasury may redeem in silver at its current market price reckoned in gold. This is equivalent to redemption in gold.

SECTION 12

Weighting revised four times a year and the entire schedule yearly.—[O. B. Burtness, M. C., 1926, 69th Congress, First Session. From speech by Mr. Burtness, on H. R. 124.]

(a) Criticize the plan offered by Mr. Burtness.

787. Advantages of International Uniform Currency

But if gold coins are going to be used in the future, it seems to me they might be the base of a more international system of money than we have at the present time. It so happens that the units of the leading countries are nearly in relation to one another.

The CHAIRMAN: You mean by that the establishment of a gold settlement fund similar to that which is used by the Federal Reserve system here for making settlements between the different districts.

Prof. LEHFELDT: First of all, you have approximately $5 equal to the pound sterling, and five gold francs equal to a dollar. You have some relations like that, which are not accurate, but nearly so. Now if a little adjustment were made in the weights of the different gold coins, they could be brought into an exact relation like that, such as that one pound sterling or a five-dollar gold piece, or a twenty-five franc gold piece, would all be identical coins. You would have a different stamp on them, but they would have the same weight of gold and consequently would be interchangeable one with another.

I suggest it would be a step in advance in the organization of the world's money if the powers would agree to a unit of that sort. The unit I suggest is seven and one-half grams of pure gold. That is a little bit more than the sovereign at the present time; just a shade less than $5, and has a fairly close relation with other important units.

The CHAIRMAN: I see here from the table I have before me that the decimal unit of the British sovereign is 7.322—the present weight in grams. Your proposed increase in the weight would be .178?

Prof. LEHFELDT: Yes.

The CHAIRMAN: And the five-dollar U. S. gold piece would be 7.523, and you would decrease that by .023?

Prof. LEHFELDT: Yes.

The CHAIRMAN: And, in the francs, it is 7.258, which would mean an increase in grams of .242. The yen practically is seven and a half now.

Prof. LEHFELDT: Yes, sir.

The CHAIRMAN: And the guilder of the Netherlands would be a decrease in grams of just a slight fraction?

Prof. LEHFELDT: Very slight. They are all so nearly together that a little adjustment would make seven and one-half gram coins available for all the different countries. Five dollars would be one sovereign; five francs would be 12½ guilders, and so on.

And it seems to me such a coin would come to be used by international banks, and so on, and would flow from one country to another and any country would put its own stamp on it and the people would be allowed freely to use this coin from whatever country it comes.

The CHAIRMAN: Of course, in this country, we are using our gold

principally as a reserve and we are using Federal Reserve notes as the circulating medium.

Prof. LEHFELDT: Yes.

The CHAIRMAN: To a greater extent than we have ever done before. I suppose the degree to which other countries adopted that same plan would have an influence on the situation too, would it not?

Prof. LEHFELDT: Yes. It would depend upon whether they had the habit of using gold coins or paper. There are two things involved; one is the advantage of having a decimal relation between the units leading at some time or other to an international use, and the other is the convenience of having coins of a uniform weight. They are not identical, except even if the world uses paper money, there would be a certain advantage of the units of the paper money fitting into one another.

If the world did use gold coins, it would be a greater advantage, because then those gold coins would be the natural form which the reserve would take and it would be shifted from one country to another.—[Prof. R. A. Lehfeldt, before Congressional Committee, 1926.]

(a) What success attended the attempts of the Latin Union at establishing and maintaining a uniform currency? (b) In what sense does the problem differ from establishing a uniform currency for all the United States? (c) Would the adoption of uniform gold coinage include the adoption of similar names for the coins, similar designs, similar fineness, similar brassage charges, similar minor coins and subsidiary coins? (d) In what ways would the adoption of uniform gold coinage simplify the foreign exchanges?

CHAPTER XXVI

BUSINESS CYCLES

788. Nature of Business Cycles

A business cycle is a rhythmical movement of business which is most prominently evidenced by a rapid increase in the price level, followed by a decline in the price level, then a slow upward trend.—[A. B. Adams, Economics of Business Cycles, 1925, p. 29, McGraw-Hill Book Co., New York, by permission.]

(a) Is the business cycle a cyclical variation of one business category or of a composite of many categories? (b) If one wanted to determine with some degree of precision the period or amplitude of the business cycle what would he use as measures of it? Would he use prices, products consumed, products produced, volume of credit, turnover of money or credit or goods? Would he use the prices of goods, services, stocks, bonds, or money? If he used more than one measure and there was not exact agreement, how would he determine the cycle? (c) Under the domestic system of economy what was the cause of economic variation? In the present capitalistic system what cause is added? (d) Is the business cycle a true mathematical cycle? (e) Business cycles are said to differ in constitution, intensity, and duration. Illustrate from American business cycles. (f) Into what phases are business cycles divided by Adams, Moody, Babson, Brookmire, Harvard Committee on Economic Research, Mitchell? Account for these differences in classification. (g) Of the various phases of the cycle what are the relative lengths?

789. Normal State of Trade

The broadest conclusion established by the long and wide experience covered by the annals is that there is not a "normal state of trade." The phrase is common both in treatises upon economic theory and in the talk of business men. Yet the historical record shows no reality corresponding to this figment of the imagination. If "normal" is interpreted to mean usual, prevailing, that which exists in the absence of grave "disturbing causes," the annals show that the only normal condition is a state of change —which is not what the phrase means to those who use it. . . . If "normal" means, not that which usually does prevail, but that which we think should prevail, it is usually a figment—though one of a useful kind. —[Thorp, Business Annals, p. 31, National Bureau of Economic Research Inc., New York City, by permission.]

(a) Are arguments or theories on the business cycle which start from an assumed "state of economic equilibrium" or "normal state of trade" necessarily fallacious? (b) Define "normal," if possible, in a way satisfying the conception of "normal state of trade."

790. Business Cycles and the Weather

Business cycles vary in length. The range of variation, however, is not so great but that it suggests the possible presence of some definite periodic element. This, in turn, has suggested to various observers that one or another of the periodic forces of nature may be at work. In various phenomena, such as the seasons, the tides, and different types of vibratory motion, nature displays a rhythmic periodicity. On the assumption that the business cycle has a fairly normal period—an assumption not yet verified, and, on the whole, doubtful—it would by no means be unreasonable to look to external natural forces for its controlling causes.—[Homer B. Vanderblue's Problems in Business Economics, p. 9, A. W. Shaw Company, Chicago.]

(a) What is the "sun-spot" theory of Prof. W. S. Jevons? (b) What is the "phase-of-Venus" theory of Prof. H. L. Moore? (c) What contribution to the business cycle theory was made by Sir William Beveridge? (d) How is Mr. Herbert Janvrin Browne, of Washington, D. C., attacking the problem of long-range weather forecasting? What is the position of the U. S. Weather Bureau on this subject?

791. Theory of the Business Cycle—Mitchell

The recurrent phases presented by economic activity, whenever it is dominated by the quest of profits, grow out of and grow into each other. An incipient revival of activity, for example, develops into full prosperity; prosperity gradually breeds crisis; the crisis merges into depression; depression becomes deeper for a while, but ultimately engenders a fresh revival of activity, which is the beginning of another cycle. . . . A theory of business cycles must therefore be a descriptive analysis of cumulative changes by which one set of business conditions transforms itself into another set.—[Mitchell, Business Cycles, 449.]

(a) This has been called a "self-generating theory": why? (b) In most instances "revival began quietly without the occurrence of any propitious event sufficiently striking to impress itself upon the attention of contemporary chroniclers." Contrast this position with the Adams conclusion. [See Adams, Economics of Business Cycles, pp. 131, 212.]

792. Theory of the Business Cycle—Foster and Catchings

By way of summary, we may now enumerate some of the phases in the upward swing of business cycles that culminate in a deficiency of consumers' purchasing power:

In a period of depression, prices, profits, wages and the cost of doing business are low, and bank reserves are high. At the close of the period, stocks are low because dealers have been ordering only to cover day to day needs. The time comes, however, when the purchase of certain kinds of commodities cannot longer be postponed. About this time, dealers believe that prices have reached bottom. They increase their orders, cautiously at first. Manufacturers increase their output. There is a growth in the physical volume of trade.

At first, when the volume of production increases, wages reach consumers' markets as increased effective demand in advance of the increased supply of commodities.

This stimulates a rise in prices which would otherwise come more slowly.

The rise in prices accelerates the buying movement.

Prices rise faster than wages.

For a while, partly because of increased bank loans, partly because of delays in delivery of commodities to markets, partly because of the speculative withholding of commodities, enough money flows into consumers' hands to buy, at the higher price-level, enough commodities to sustain the orders of retail merchants.

Profits, however, rise faster than wages, and profits are not disturbed until after the commodities are sold upon which the profits are realized.

The time comes when the markets feel the full effects of the increased supply of commodities, but when the increased volume of purchasing power, due to the expansion of bank loans, is not sufficient to keep dollar-demand up with supply.

Then, there must be further expansion of bank loans or a fall in the price-level. But, on account of reserve requirements, bank loans cannot expand indefinitely at a sufficiently rapid rate.

Furthermore, the eagerness to expand operations is curbed by the increased costs of doing business; wages, salaries, rent, and interest, which lagged behind profits, begin to catch up.

As soon as the banks, by raising the bank rates, indicate that the expansion of bank credit is approaching an end, speculators unload stocks, dealers diminish orders, and producers curtail production.

Prices stop rising.

As soon as prices stop rising, they begin to fall, since much of the business that has sprung up during the rise in prices depends for its existence upon a continued rise in prices.

Once prices begin to fall, many influences operate together to continue the movement and a period of business depression ensues.

In this whole movement, the central factor is a changing volume of money flowing through various channels in such a way as to cause, or at least to make possible, changes in the annual equation and the price-level. —[Foster and Catchings, Money, pp. 349-50, Houghton Mifflin Co., Boston, by permission.]

(a) Analyze the whole theory in the light of the last paragraph. (b) Does this theory agree with Adams' theory which requires an outside fortuitous force to initiate a period of prosperity? [See Adams, Economics of Business Cycles, p. 131.] (c) Summarize the reasons why at the top of the business boom the purchasing power of consumers falls short of the volume of goods produced for con-

sumption. (d) Is the Foster-Catchings theory the same as the Prof. Hudson M. Hastings theory? [See his "Costs and Profits."]

793. Forces which Destroy the Cumulative Movement of Prices during Prosperity

This cumulative process would go on indefinitely if it were not for three forces which inevitably come into play to destroy it. Either of these forces working singly would eventually terminate it, and, probably, singly or, certainly, all working together will start a reverse movement in demand and in prices. These forces are (1) the inevitable expansion in the physical volume of output of consumers' goods to the point where the rate of increase in output will equal or exceed the rate of increase in the quantity of money incomes; (2) the rate of increase in the cost of production per unit in industry will eventually exceed the rate of increase in price received per unit; and (3) the available bank credit upon which the expansion has fed will be exhausted.—[Adams, Economics of Business Cycles, p. 169, McGraw-Hill Book Co., New York, by permission.]

(a) Why does the output of consumers' goods eventually expand more rapidly than the rise in consumers' money incomes? What becomes of the extra goods? Will the consequent decline for producers' goods be more precipitate than that for consumers' goods? (b) In the upward movement of business activity wholesale prices lead, by good but varying periods, the rise of wages, interest rates, rents, and other costs of production: explain this lag in terms of existing contracts, relative bargaining position of employer and employee or of borrower and lender or of landlord and tenant, relative shrewdness of these parties in understanding the situation.

794. Velocity of Circulation of Money and the Business Cycle

There is no evidence that the velocity of circulation of money increases with rising prices and output. The fact that bank deposits increase faster than bank clearings during periods of expansion would indicate that the velocity of circulation of money decreases at such times.—[Adams, Economics of Business Cycles, p. 163, McGraw-Hill Book Co., New York, by permission.]

(a) Test this proposition statistically. (b) Argue the probable movement of the velocity of money during the business cycle. (c) If the velocity of money does vary with the business cycle, what effect does its variation have on the amplitude of the cycle itself? (d) Is the velocity of the circulation of money the same as the velocity of bank credit?

795. Causes of Period of Prosperity

The analysis of business cycles . . . is started by attacking the problem of what brings about or initiates the cumulative upward trend of prices.

The question then is, what produces a period of prosperity? How and why do the causal forces operate?

Under the present business system all business enterprises are conducted for profits; profits depend upon the margin between the cost of the goods sold and the prices received for them. . . .

In order that profits may be high there must be a market shortage of goods. This means that the physical output of the goods is insufficient to supply the physical quantities demanded by purchasers without increasing their prices. . . .

Our problem is to find out why, in the face of economic forces which tend to reestablish an economic equilibrium, at certain times a market shortage of goods seems to beget further market shortage and still higher prices and profits. . . .

The heart of our problem then is to explain (1) how and why a general market shortage of consumers' goods develops sufficiently to bring about a rise in the general level of prices of both consumers' goods and producers' goods, and (2) why this upward movement becomes cumulative.

A general market shortage of consumers' goods can come about only as a result of either a decrease in the market supply (quantity of goods offered at prevailing prices) or an increase in the market demand (quantity of goods purchased at prevailing prices) or through both causes acting jointly. . . . —[Adams, Economics of Business Cycles, pp. 112-113, McGraw-Hill Book Co., New York, by permission.]

(a) What is the status of demand, supply, and price at the beginning of the depression? at the bottom of the depression? (b) "When the point of reasonably full use of all the effective capital equipment in the industrial system is put into operation to supply goods to satisfy the consumptive desires of the public, would a general rise in prices of all classes of goods inevitably take place?" How does the diversion of capital to the production of producers' capital affect the balance between the consumption and supply of consumers' goods? (c) "Rising prices can be initiated by a sufficient increase in consumers' money incomes. But consumers' demand cannot produce the necessary increase in money incomes. Increasing consumers' demand, therefore, cannot initiate rising prices to such a degree that cumulative prosperity will follow as a result." Defend this position. (d) "The principal forces which may produce a favorable ratio between the sum total of incomes and the physical volume of consumers' goods offered on the markets are: (1) an increase in the production of gold; (2) favorable balance of trade; (3) wars; and (4) rapid expansion of capital equipment." Is the initiation of prosperity dependent therefore upon such fortuitous events as these? (e) "The period of recovery following a prolonged period of depression is the most propitious time for the development of a cumulative expansion of capital equipment." Show why. (f) According to the views of Veblen, the introduction of new machines,

processes, and other cost-reducing factors, tends to prolong depression rather than to initiate prosperity. [See Veblen, The Theory of Business Enterprises, pp. 218-238.] Look up the statistics of the new incorporations and the new security flotations and determine whether it is probable that new types of machinery and new kinds of consumers' goods are extensively introduced on the market during depression by new and reorganized enterprises.

796. Effect of Interest Rates on Business Activity

We may easily exaggerate the importance of interest rates in influencing expansion and contraction of bank credit. In so far as the interest rate influences the prospective net profit which a business man expects to receive from a venture it will influence the making of the loan. The prospect of a net profit will depend more largely upon the size of the gross margin of profit and the time it takes to make the transaction, than upon the rate of interest on the loan which is to be deducted therefrom. Low rates of interest during periods of depression do not induce business men to borrow heavily from banks. At such times the prospective gross profits are small. And during periods of prosperity high interest rates do not deter them from borrowing heavily from banks, because prospective gross profits are large.

The initiation of the expansion of bank credit is largely brought about, therefore, by business men—not by bankers—because of large prospective profits. They potentially demand more goods and services and go to the banks and borrow the "money" with which to make the purchases. Should the banks refuse to extend the loans, the "demand" of the business men could not become effective and prices would not go up. In this sense and only in this sense, the expansion of bank credit is the cause of a rise in prices. An increased desire for goods brings about the expansion of credit, and credit makes possible the translation of the desire into an effective demand and thus prices are raised. Credit then makes a price rise possible but is itself created by the same cause which produces the price rise—that is, potential demand.

Whenever a price rise starts, it causes business men to demand more credit; they must have more circulating capital with which to do business; they desire to increase their volume of business in order to grasp advantages brought about by rising prices. So rising prices cause further expansion of credit. Further credit makes potential demand effective and produces higher prices—at least for a time. Therefore, after the upward trend of prices has begun the expansion of credit causes higher prices and higher prices cause the expansion of credit.

When credit contracts there is a decline in general price level. Forced contractions of credit on the part of banks will bring about a decline in prices. But it does not follow that all general declines in prices are brought about by a contraction of credit. The underlying business conditions may decrease the potential demand for goods to such an extent that prices decline and the contraction of credit follows. Business men may decide to curtail their operations, because little or no prospective profits are in sight. The bankers are willing, even insistent, that the business men curtail their credit, but their attitude is brought about by the unfavorable

underlying business conditions and not by the lack of cash reserves.—[Adams, Economics of Business Cycles, pp. 109-10, McGraw-Hill Book Co., New York, by permission.]

(a) A manufacturer, with an overhead of $100,000 a year, producing 1,000,000 units of product which are selling at $2 each, and requiring $200,000 of working capital, contemplates taking an order for 200,000 additional units; he figures that this will increase his overhead $10,000, his working capital requirements $25,000; the price he is to get on the additional 200,000 units is $2.25, but the rate of interest he will have to pay on the additional funds for overhead and working capital for the three months necessary will be 1% higher than on the other $300,000 borrowed. Will the higher interest restrain him from taking the order? (b) A stock speculator operating largely on money borrowed at call on the Street finds the money rate jumped from 3% to 5%, but the stock market is bullish rising from 1% to 3% per day on an average. Will the rising interest cost make him liquidate and quit the market? (c) Suggest some method of measuring the increased demand for credit from banks that results from the rise of prices of commodities.

797. Relation of Credit to Volume of Production

So, under a condition of general rising prices, business enterprises as a whole must supplement the current purchasing power which they receive from sales with purchasing power borrowed from banks, in order to carry on the same physical volume of business. And in order further to increase the total physical volume of business, still more purchasing power must be borrowed from the banks. Assuming that no gold is produced within the country, and that no additional gold or money is imported into the country, the expansion of credit within the country will tend to equal the increase in the money value of the goods bought and sold from day to day.—[Adams, Economics of Business Cycles, p. 99, McGraw-Hill Book Co., New York, by permission.]

(a) The purchasing power borrowed at a bank is in the nature of property rights evidenced by notes issued or deposits subject to check; property rights must be coextensive with wealth, ownership being coextensive with the wealth owned; when credit is extended by a bank to increase the purchasing power of a customer is there an addition to the total purchasing power of the community? or is the bank's function simply to convert wealth not then being used for exchange for other goods, into market channels for such exchanges? (b) At any time is the total existing credit all employed in exchanges for goods: if not will "the expansion of credit within the country tend to equal the increase in the money value of the goods bought and sold from day to day"?

798. Forces which Tend to Destroy the Economic Equilibrium

The principal forces inherent in the economic, industrial, and business systems which make possible the upsetting of the equilibrium are:

1. The minute division of labor among industries
2. The roundabout method of production
3. The lack of a centralized power which coordinates the work of all competing and complementary business enterprises
4. The constant invention of new types of capital and new processes
5. The change in the quantity of purchasing power brought about by the expansion and contraction of credit.

The forces which tend toward equilibrium are:

1. Freedom of contract
2. Competition
3. Desire for profits—[See Adams, Economics of Business Cycles, pp. 26-27, McGraw-Hill Book Co., New York, by permission.]

(a) Define and describe economic equilibrium. (b) Show how each of the factors named tends to disturb equilibrium. (c) Show how each of the factors named tends to restore economic equilibrium.

799. Theories of the Business Cycle

Name of writer who has developed a theory of the business cycle that may be classed under each of the following types of theory:

Competition theory
Discrepancy between wages and productivity
Over-saving
Theory of diminishing utility
Over-capitalization
Ill-balanced production of industrial equipment and complementary goods
Changing costs of construction
Variations in prospective profits
Discrepancy between prospective profits and current capitalization
Uneven expansion in the production of organic and inorganic goods
Dissimilar price fluctuations of producers' and consumers' goods
Theory of lagging adjustment of interest
Theory of impair savings.—[See Mitchell, Business Cycles, pp. 6-18.]

800. Effect of Saving on the Business Cycle

Everybody knows that a relative general glut reappears every time credit collapses and that it is a natural and regularly reappearing phenomenon of deflation. Whenever demand undergoes a sudden and violent change, we get to a certain degree a paralysing of industry affecting trade as a whole, and that is so whether demand shifts from one kind of consumers' goods to another, or to producers' goods.

Now we know that the psychological process of saving is abstinence, but the technical process is that of shifting the demand and production

from consumers' to producers' goods. There is a difference in the effects of shifting the production onto consumers' goods and onto producers' goods, because the first is consumed, but the latter is productive of more goods. If we go on saving we augment the fund, which in its action must create more consumers' goods; and then the question, at first sight rather a strange one, arises, whether excessive savings can create a state of over-production.

Hobson: "Excessive saving operates through deficient demand for commodities to slacken the sinews of production and produce more capital goods than we are able to put to full productive use. The current distribution of income through the industry tends normally to evoke a rate that is excessive."—[*Economic Journal,* March, 1927, p. 21.]

(a) In the course of the business cycle how can the validity of this theory of over-saving be statistically proved or disproved? (b) If the theory is sound, is it necessary, as some hold, that in the course of the prosperity period some industries become over-developed and some under-developed relatively to each other, or would the crises come even if the savings were distributed in well-balanced proportion among the industries? (c) If this theory is sound, is the business cycle remediable? If so, how?

801. The Marxian Theory of Crises

Marx bases his arguments on the fact of a progressive accumulation of capital due to an ever-increasing surplus value (Mehrwert), appropriated by the capitalist and not entirely spent in consumption, but partly turned into new capital. As long as the organic composition of capital is unaltered, labour is not the worse off. Competition, however, and the individual will to profit compel the owners to invest their savings in a higher technique, characterised by a greater proportion of capital invested in labour-saving machinery and a smaller proportion in the wages fund. Thus the reserve army of industry is augmented, and the man on the labour exchange keeps wages down for the man within the factory gate. The increase in capital accompanied by an increase of the "reserve army" makes an increased productivity meet with a decrease in the purchasing power at the disposal of the majority or the people. The "bourgeois" refuses to buy the new consumers' goods, and goes on saving. During the crises the bourgeoisie counteracts the coming glut by stopping the factory wheels, incidentally throwing further labour on the street, thereby reducing the total buying power of the community.—[*Economic Journal,* March, 1927, p. 22.]

(a) Is this the same theory of over-production as that advanced by Hobson, namely, that over-production is caused by over-saving? (b) What is meant by "ever-increasing surplus value"? (c) Does the socialist theory assume that wages are a fixed quantity, always near the minimum of subsistence, and that labor's proportion of the total national income is ever decreasing? Is there any statistical evidence on this point? (d) Marx divides society into two classes—capitalists and proletariat. "The technical development favours, even

necessitates, the existence of a daily increasing middle class of traders, clerks, and professional men, and this class are in an increasing degree actual consumers." Does this fact affect the Marxian position? (e) "The formula C/L—indicating the amount of capital and the number of workers—determines the relative strength of the two factors; the greater C, the higher wages must be. Furthermore, working men do not save in any considerable degree. My argument is, then, that the accumulation of capital gives the workers a better tactical position, a greater bargaining power, affecting wages; thus labour is able to demand a greater part of the produced goods than before." Develop this argument. (f) Are foreign exports able to absorb the surplus of consumable goods produced? (g) "The socialistic authors are then only right if they give their theory of overproduction this form: whenever labour-saving technique increases at a *quicker pace* than capital, labour is thrown on the street, its purchasing power is deteriorated, at the same time as productivity is increased. If now the owning classes do not buy the consumers' goods produced, we may for a time face a kind of general glut." Argue this restriction on the Marxian theory.

802. Fisher's Equation of Exchange

The quantity theory of money is usually stated in somewhat the following terms: Other things remaining equal, the price level varies directly as the quantity of money in circulation and the purchasing power of the money unit decreases as the quantity of money in circulation increases. Quantity of money refers to the number of monetary units. Professor Irving Fisher states the theory in greater completeness by a simple algebraic formula: $MV + M'V' = PT$. In this formula M is the quantity of money in circulation, V is the velocity at which it circulates; M' is the volume of bank deposits subject to check, and V' is the velocity at which they turn over; P is an index of the general price level, and T is the volume of trade. MV represents the total purchases with money; and $M'V'$ represents the total purchases with deposits; and since purchases are made in these two ways quite largely, the sum of these two products represents the total expenditure of the people for the period of time covered by the calculation. Since PT is the product of price and quantity of every and all goods, it too represents the total expenditure of the people. The factors M and M' are not wholly independent factors.

For description and statistics of the equation see Fisher, The Purchasing Power of Money.

(a) Suggest some method of calculating each of the above factors. (b) What are the interrelations between M and M'? What

effect does this dependence have on the variations of the factors of the equation? (c) What factors will make M increase? V increase? M' increase? V' increase? T increase? an increase of M, M', V, or V' will have what effect on P? a decrease in T will have what effect on P? (d) What factors in the above equation are affected by the urbanization of the people of the United States? how? with what effect on the price level? What is the resultant effect of all the effects of all the factors on the price level?

803. Methods of Studying Business Cycles

For our work upon business cycles in the National Bureau of Economic Research we have made two collections of materials, which we think others will find useful.

One is a collection of statistics. We are assembling in a single source-book the widely scattered records of economic and social activities in Great Britain, France, Germany, the United States, and, to a limited extent, in other countries. We are going back to the earliest compilations of continuous series and coming down to the current year, making critical notes upon the character of the data, piecing together fragments, and presenting the figures by months or quarters whenever possible. When this collection is ready for use, we hope that we shall be enabled to publish it in two or more volumes.

The second collection, consisting of what we call "business annals," is presented in this book. Though less bulky than the statistics, these annals cover a wider area and a longer period. For the statistical record shrinks rapidly as we go back 25, 50, or 100 years; few indeed are the series extending to the earliest decades covered by our British and American annals. Another difference is that the annals sketch a general situation of which the statistics show certain parts in detail. Thus the two collections supplement each other—one presents the most precise records kept of specific economic or social processes at large; the other traces the fluctuations in economic and social fortunes at large. Together they sum up much of the experience which may be made to light the path into the future.—[Thorp, Business Annals, pp. 15-6, National Bureau of Economic Research, Inc., New York, by permission.]

(a) Which is the simpler collection? What are the sources of the annals? (b) Annals of what activities ought to be collected? (c) For comparative studies, either with respect to different periods, or to different countries, why are annals more useful than the statistical records? (d) What mathematical difficulties are avoided by the annals method? (e) If the testimony of the annals records and of the statistical records conflict which should be adopted? (f) Will any single type of transactions represent all the important phases of business activity? Will any composite index of the volume of trade represent the volume of trade to the complete satisfaction of the statistician?

804. Indexes of Production versus Indexes of Volume of Trade

It seems clear . . . that indexes of production alone, especially as they are largely derived from the great basic industries, are not, as has been assumed, a reliable index of the volume of trade or of "business activity," either in their time relations or in the percentages of variation shown. And the same appears equally true of composite indexes derived from railway traffic, factory employment, etc.—[C. Snyder, Journal of the American Statistical Association, 1924, pp. 40-41.]

(a) What is Snyder's conception of the "volume of trade"? (b) What factors does he use in calculating his index of trade? Contrast this list with the list used by the Harvard Committee in their "B curve." (c) Is "volume of trade" the same as "business activity"?

805. General Index of Payroll Totals in Manufacturing Industries

Month	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
January	.....	52.1	69.8	79.6	104.2	126.6	80.6	71.5	91.8	94.5	90.0	94.9
February	.....	57.8	70.5	79.8	95.0	124.8	82.4	76.7	95.2	99.4	95.1	98.9
March	.....	60.0	73.6	88.2	95.4	133.0	83.3	74.2	100.3	99.0	96.6	99.1
April	.....	59.7	69.4	88.8	94.5	130.6	82.8	72.6	101.3	96.9	94.2	97.2
May	.....	62.1	75.8	94.5	96.7	135.7	81.8	76.9	104.8	92.4	94.4	95.6
June	.....	62.5	76.1	94.3	100.2	138.0	81.0	82.0	104.7	87.0	91.7	.....
July	.....	58.7	73.1	97.5	102.5	124.9	76.0	74.1	99.9	80.8	89.6	.....
August	.....	60.9	75.0	105.3	105.3	132.2	79.0	79.3	99.3	83.5	91.4	.....
September	.....	92.9	74.4	106.6	111.6	128.2	77.8	82.7	100.0	86.0	90.4	.....
October	.....	65.5	82.2	110.3	105.5	123.0	76.8	86.0	102.3	88.5	96.2	.....
November	53.8	69.2	87.4	104.1	111.3	111.3	77.2	89.8	101.0	87.6	96.2	.....
December	56.0	71.0	87.8	111.2	121.5	102.4	81.5	92.9	98.9	91.7	97.3	.....
Average	[1]54.9	61.9	76.3	96.7	103.6	125.9	80.0	79.9	100.0	90.6	93.6	[2]97.1

[1] Average for 2 months. [2] Average for 5 months.

(a) On the same graph plot the General Index of Employment and the above index of payroll totals. At what points are there the greatest discrepancies? why? (b) Divide each monthly figure by the corresponding figure of the Index of Retail Prices or the Index of the Cost of Living. Plot the quotients. What does the resulting curve represent? (c) Since 1922 has labor been enjoying a higher standard of living?

806. General Index of Employment in Manufacturing Industries

(a) Plot this index. (b) Is there a distinct trend? a distinct seasonal variation? a distinct cyclical variation? (c) On the graph in (a) plot the Snyder Index of General Trade, and study the relation of the two curves. Is there any lag? (d) In what period is there the greatest stability of employment?

[Monthly average, 1923 = 100]

Month	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
January	.....	91.9	104.6	117.0	115.5	110.1	116.1	76.8	87.0	98.0	95.4	90.0	93.3
February	.....	92.9	107.4	117.5	114.7	103.2	115.6	82.3	87.7	99.6	96.6	91.6	94.3
March	.....	93.9	109.6	117.4	116.5	104.0	116.9	83.9	83.2	101.8	96.4	92.3	93.7
April	.....	93.9	109.0	115.0	115.0	103.6	117.1	83.0	82.4	101.8	94.5	92.1	92.8
May	.....	94.9	109.5	115.1	114.0	106.3	117.4	84.5	84.3	101.8	90.8	90.9	91.7
June	98.9	95.9	110.0	114.8	113.4	108.7	117.9	84.9	87.1	101.9	87.9	90.1	.....
July	95.9	94.9	110.3	114.2	114.6	110.7	110.0	84.5	86.8	100.4	84.8	89.3	.....
August	92.9	95.9	110.0	112.7	114.5	109.9	109.7	85.6	88.0	99.7	85.0	89.9	.....
September	94.9	98.9	111.4	110.7	114.2	112.1	107.0	87.0	90.6	99.8	86.7	90.9	.....
October	94.9	100.8	112.9	113.2	111.5	106.8	102.5	88.4	92.6	99.3	87.9	92.3	.....
November	93.9	103.8	114.5	115.6	113.4	110.0	97.3	89.4	94.5	98.7	87.8	92.5	.....
December	92.9	105.9	115.1	117.2	113.5	113.2	91.1	89.9	96.6	96.9	89.4	92.6	.....
Average	[1] 94.9	97.0	110.4	115.0	114.2	108.2	109.9	85.1	88.4	100.0	90.3	91.2	[2] 93.2

[1] Average for 7 months. [2] Average for 5 months.

807. Bank Clearings as a Business Barometer

Clearing house transactions in the 12 Federal reserve cities in the year ended September 30, 1926, aggregated $426,914,203,000 and exceeded the amount in the previous year by $22,446,137,000. The ratio of clearings by associations in the 12 Federal reserve bank cities was 79.61% of the total clearings in all associations in 243 reporting cities in the United States, in comparison with the ratio of 80.05% a year ago.—[Report Comptroller of the Currency, 1926, p. 73.]

(a) Give the reasons why bank clearings are considered a good measure of the volume of business transacted. (b) What checks drawn do not reach the clearings? (c) What effect on clearings does the consolidation of two or more members of the clearing house have? (d) Should interbank checks and drafts be added to the total of individual checks for barometric purposes? (e) In what respects is the total of individual debit check transactions of the bank a better measure of business transacted than the total of clearings? (f) Do clearings or check transactions measure past, or present, or future business? How great is the lag? (g) Suggest a plan for eliminating the effect of changes of price level on clearings. (h) Which is the better measure of the business of the country, the clearings (or debit check transactions) of New York City banks alone or the clearings (or debit check transactions) of the banks outside New York City? Plot the series against each other and note their disagreements.

Bank Clearings. Unit: $1,000,000,000
United States Outside New York City

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
1926....	20.53	17.35	20.41	19.57	19.03	19.97	19.96	18.27	18.81	20.57	18.88	20.52	19.49
1925....	19.44	16.43	18.66	18.55	18.04	19.21	19.59	17.82	18.98	21.32	19.32	21.08	19.04
1924....	17.74	15.49	16.93	16.89	16.75	16.08	17.12	16.05	16.71	19.03	17.45	19.31	17.13
1923....	17.55	14.48	17.32	16.61	17.29	17.05	16.30	15.46	15.37	17.91	16.74	17.40	16.62
1922....	12.67	11.18	13.39	12.76	13.58	14.01	13.47	13.42	13.96	16.00	14.84	15.62	13.74
1921....	13.04*	11.17	13.31	13.40	11.75	12.23	11.87	11.86	12.20	13.13	12.42	13.44	12.49
1921....	14.96	12.11	14.32	13.37	12.76	13.23	12.80	12.80	13.21	14.24	13.64	14.42	13.49
1920....	18.46	15.17	19.01	17.88	17.10	17.94	17.75	16.56	17.49	18.20	16.66	16.77	17.42
1919....	14.56	11.61	13.61	13.28	14.31	14.50	15.64	15.18	16.00	18.12	16.76	18.40	15.16
1918....	11.81	10.00	12.24	12.39	12.71	12.46	13.24	13.20	12.71	15.15	13.74	14.15	12.82
1917....	10.51	8.84	10.56	10.36	10.73	10.64	10.48	10.41	10.15	12.54	12.39	11.92	10.79
1916....	7.81	7.19	8.20	7.75	8.16	8.10	7.99	8.05	8.05	10.02	10.16	10.36	8.52
1915....	6.20	5.43	6.28	6.20	5.99	6.10	6.23	5.73	6.14	7.41	7.56	7.97	6.44
1914....	6.83	5.63	6.40	6.35	5.93	6.10	6.31	5.35	5.40	6.13	5.68	6.11	6.02
1913....	6.93	5.84	6.28	6.26	6.18	5.98	6.21	5.63	5.99	7.03	6.31	6.68	6.28
1912....	6.23	5.66	6.04	6.14	6.04	5.67	6.02	5.72	5.64	7.01	6.55	6.55	6.27
1911....	5.97	4.97	5.85	5.43	5.57	5.62	5.55	5.28	5.42	6.06	6.03	6.09	5.65
1910....	5.91	4.98	6.00	5.70	5.37	5.48	5.43	5.08	5.16	5.92	5.82	5.91	5.56
1909....	5.16	4.37	5.13	5.07	4.91	5.04	5.15	4.82	5.06	5.82	5.72	5.94	5.18
1908....	4.63	3.88	4.30	4.30	4.21	4.19	4.48	4.04	4.34	4.91	4.80	5.12	4.43
1907....	5.42	4.49	5.10	4.99	5.07	4.79	5.06	4.67	4.54	5.61	4.18	4.06	4.83
1906....	5.10	4.15	4.63	4.36	4.44	4.43	4.40	4.32	4.20	5.21	5.05	5.04	4.61
1905....	4.11	3.53	4.19	4.05	4.18	4.08	4.03	3.92	4.03	4.60	4.61	4.76	4.17
1904....	3.76	3.30	3.59	3.53	3.39	3.50	3.48	3.36	3.50	4.05	4.18	4.30	3.66
1903....	3.90	3.23	3.58	3.64	3.54	3.68	3.79	3.26	3.38	3.94	3.56	3.80	3.61
1902....	3.73	3.01	3.38	3.57	3.58	3.24	3.58	3.13	3.35	3.86	3.55	3.72	3.47
1901....	3.32	2.74	3.12	3.38	3.51	3.25	3.29	3.06	2.92	3.59	3.49	3.50	3.26
1900....	2.98	2.49	2.79	2.76	2.84	2.79	2.70	2.52	2.47	3.05	3.05	3.14	2.80

* A number of cities discontinued their reports of bank clearings at the beginning of 1922. Data for the year 1921, therefore, are repeated for purposes of comparison.

New York City

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
1926....	27.10	21.45	28.09	25.96	23.39	24.19	23.83	21.68	21.36	24.33	22.25	26.72	24.19
1925....	26.72	21.06	23.35	22.85	23.85	24.02	23.40	20.22	21.77	25.95	23.48	26.96	23.64
1924....	20.69	18.12	19.65	20.33	20.72	19.96	21.13	20.34	19.29	21.58	22.43	25.63	20.82
1923....	19.78	16.78	19.77	18.01	19.21	18.68	16.65	14.78	15.07	17.73	18.05	19.50	17.83
1922....	17.30	15.34	18.72	18.76	19.22	20.11	18.34	16.94	17.29	19.67	17.33	18.90	18.16
1921....	18.57	14.53	16.68	15.54	15.85	16.85	15.36	14.56	15.08	16.03	16.82	18.48	16.20
1920....	23.21	18.14	22.33	21.80	19.74	20.51	19.83	17.89	18.60	20.66	19.43	20.98	20.26
1919....	17.86	14.19	16.49	17.33	18.88	19.75	21.88	19.53	19.61	23.71	22.59	23.98	19.65
1918....	14.72	12.26	13.84	14.09	15.56	14.86	15.40	14.96	13.66	16.92	15.61	16.66	14.88
1917....	15.13	12.79	14.23	14.65	15.58	16.10	15.19	14.68	13.88	15.72	14.83	14.61	14.78
1916....	12.33	11.11	12.55	11.62	12.56	12.55	11.44	11.77	14.36	15.71	16.65	16.94	13.30
1915....	7.29	6.48	7.57	8.81	8.64	8.03	8.70	8.54	9.62	12.74	11.83	12.33	9.22
1914....	9.37	7.24	7.85	8.55	7.24	7.84	8.18	4.58	4.63	5.61	5.40	6.53	6.92
1913....	9.34	7.79	7.89	8.06	7.96	7.75	7.34	6.76	7.46	8.69	7.59	8.00	7.89
1912....	8.84	7.31	8.42	8.83	8.78	7.96	7.92	7.49	7.43	10.14	8.82	8.81	8.40
1911....	8.53	7.30	7.62	6.97	7.96	8.22	7.52	7.38	7.18	7.51	8.07	8.11	7.70
1910....	11.25	8.15	9.05	8.34	7.81	8.36	7.88	6.46	6.23	7.90	7.81	8.02	8.11
1909....	8.88	6.89	7.49	8.61	8.10	9.11	8.32	8.69	8.48	10.05	9.06	9.91	8.63
1908....	6.75	4.90	5.50	5.49	6.67	5.65	6.62	6.23	6.78	7.23	8.19	9.27	6.61
1907....	9.64	7.33	9.56	7.67	7.33	6.37	7.31	6.89	6.03	8.20	5.50	5.35	7.28
1906....	11.24	8.32	8.38	8.54	8.79	7.82	7.26	8.83	8.31	9.34	8.61	9.23	8.72
1905....	7.73	7.12	8.73	8.68	7.88	6.74	6.84	6.98	6.86	8.03	8.54	9.69	7.82
1904....	5.69	4.43	4.80	4.79	4.84	4.57	5.19	4.66	5.35	7.48	8.34	8.50	5.72
1903....	7.19	5.24	6.00	5.94	5.57	5.75	5.98	4.66	4.29	5.23	4.61	5.50	5.50
1902....	6.93	5.35	5.51	7.35	6.81	4.97	6.59	5.82	6.80	7.50	6.54	6.17	6.36
1901....	7.40	5.63	6.89	8.64	9.33	6.86	6.08	4.93	5.05	5.95	6.37	6.32	6.62
1900....	4.66	3.95	4.84	4.72	4.48	3.87	3.55	3.18	3.16	4.58	5.70	5.95	4.39

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Debits to Individual Accounts

New York City

(Billions of dollars)

	1919	1920	1921	1922	1923	1924	1925	1926
Jan.	18.12	23.64	20.03	19.06	22.09	22.11	27.68	30.54
Feb.	14.62	18.05	15.13	16.54	19.02	19.89	22.92	24.82
Mch.	16.70	22.28	17.35	20.40	22.54	21.55	26.38	33.01
Apr.	17.32	21.32	16.35	20.72	20.48	20.65	23.94	29.30
May	20.33	19.58	17.17	21.65	20.70	21.41	26.18	26.58
June	21.57	19.81	17.76	22.06	21.04	21.93	26.93	28.20
July	22.43	19.06	16.34	19.71	18.32	21.47	25.46	37.66
Aug.	20.28	17.37	15.19	18.29	16.19	20.92	23.27	26.24
Sept.	20.45	17.60	16.10	19.22	16.80	20.73	24.37	25.62
Oct.	24.23	20.14	17.61	22.32	19.15	22.51	28.92	28.76
Nov.	23.35	20.17	17.49	19.03	19.98	23.05	27.01	25.79
Dec.	24.86	22.41	20.58	20.85	22.08	27.33	30.31	33.20
Total	244.26	241.43	207.10	239.85	238.39	263.55	313.37	339.06

140 Cities Outside New York City

	1919	1920	1921	1922	1923	1924	1925	1926
Jan.	16.32	21.00	17.53	15.88	19.66	19.38	22.28	23.58
Feb.	13.26	17.23	14.23	14.05	16.91	17.51	18.57	20.07
Mch.	15.02	20.56	16.14	16.53	19.65	19.19	21.22	23.43
Apr.	14.95	19.74	15.46	15.67	18.81	18.86	20.59	22.51
May	16.23	19.12	14.94	16.33	19.37	18.64	20.40	21.42
June	17.11	19.97	15.41	17.18	19.53	18.30	21.68	22.44
July	18.06	20.24	14.75	16.35	18.18	18.66	21.56	23.27
Aug.	17.18	18.41	14.53	15.85	17.31	17.78	19.85	20.75
Sept.	17.64	19.26	15.13	16.55	17.26	18.24	20.87	21.31
Oct.	19.65	20.07	16.24	18.43	19.75	20.91	24.01	23.75
Nov.	18.62	18.99	15.51	17.13	18.52	18.85	21.33	21.57
Dec.	21.06	19.99	16.96	19.59	20.37	21.83	24.06	24.46
Total	205.10	234.67	186.83	199.54	225.32	228.15	256.42	268.60

[Federal Reserve Bulletin.]

808. Changes in Savings Deposits of a National Bank

The following table gives the changes in the savings deposits of a national bank in recent years:

AVERAGE MONTHLY SAVINGS DEPOSITS IN THOUSANDS OF DOLLARS

	1918	1919	1920	1921	1922	1923	1924	1925	1926
January	652	1308	1964	3643	3932	5301	6538	7439	8025
February	718	1308	2055	3730	4321	5453	6678	7587	8082
March	774	1472	2204	3793	4304	5574	6817	7608	8176
April	804	1517	2364	3762	4366	5642	6811	7636	8193
May	825	1519	2576	3820	4409	5719	6872	7626	8201
June	872	1577	2738	3861	4492	5910	6889	7659	8300
July	913	1573	2865	3861	4576	6030	6977	7713	8377
August	970	1608	3005	3719	4722	6168	7087	7809	8475
September	1053	1645	3035	3963	4697	6054	7205	7930	8530
October	1080	1664	3287	3942	4896	6363	7304	7896	8583
November	1126	1684	3360	3945	4926	6128	7292	7867	8539
December	1214	1709	3455	3936	4880	6368	7271	7937	8579

(a) If this bank allowed 3% on savings and was able to hold the accrued interest as additions to the deposits, what effect would this have on the shape of the curve showing the changes in the deposits held? (b) Keeping in mind, also, that the home city is growing in population and wealth, how would the bank determine whether it was getting its due proportion of the savings of the people of the community? (c) Does the table show seasonal variation of savings deposits? If so, suggest causes. (d) Is there any evidence of cyclical variation? Plot the series against an index of the volume of business of the country. Do the curves indicate anything as to the practice of savings depositors as regards the business cycle?

809. Bank Clearings in Canada

CLEARINGS REPORTED

(000 omitted)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total Year
CANADA	$	$	$	$	$
1926	3,929,891	4,388,475	4,217,059	5,111,536	17,646,961
1925	3,708,304	3,854,678	3,904,277	5,263,984	16,731,243
1924	3,834,897	3,950,010	4,072,622	5,120,395	16,977,924
1923	3,606,308	4,158,184	3,864,938	5,702,913	17,332,343
1922	3,840,001	4,031,429	3,706,793	4,685,582	16,263,805
1921	4,127,525	4,447,088	3,983,965	4,886,142	17,444,720
1920	4,638,357	4,924,428	4,819,816	5,849,805	20,232,406
1919	3,329,475	3,970,863	4,127,237	5,275,350	16,702,925
1918	2,818,417	3,387,131	3,212,600	4,300,425	13,718,573
1917	2,657,205	3,363,807	2,923,735	3,611,971	12,556,718
1916	2,162,216	2,618,482	2,489,518	3,236,383	10,506,599

(a) Plot this series against the similar series for the United States, and note the differences in trend and in seasonal variation. (b) With respect to the relative populations of the two countries are the clearings larger or smaller in the United States? (c) Are the cyclical changes of the two countries comparable in recent years?

810. Seasonal Variation in Business Failures

Monthly and quarterly reports of business failures, showing number and liabilities, are contrasted below for the periods mentioned:

	Number			Liabilities (in millions)	
	1926	1925	1924	1926	1925
December	2,069	1,878	2,040	45	36
November	1,830	1,672	1,653	32	35
October	1,763	1,581	1,696	33	29
4th quarter	5,662	5,131	5,389	111	101
September	1,437	1,465	1,306	29	30
August	1,593	1,513	1,520	28	37
July	1,605	1,685	1,615	29	34
3rd quarter	4,635	4,663	4,441	87	102
June	1,708	1,745	1,607	29	36
May	1,730	1,767	1,816	33	37
April	1,957	1,939	1,707	38	37
2nd quarter	5,395	5,451	5,130	101	110
March	1,984	1,859	1,817	30	34
February	1,801	1,793	1,730	34	40
January	2,296	2,317	2,108	43	54
1st Quarter	6,081	5,969	5,655	108	128

[R. G. Dun & Co., by permission.]

(a) In what seasons and months are business failures at their highest? Why? is this a dependable variation? (b) From Dun's Review procure additional current and earlier data and note the phase of the business cycle in which the greatest number of failures occur, and in which the greatest liabilities of failing concerns occur? Why the lag? Why do small failures occur later than large?

811. Gold Production and the Condition of Business

	United States (Thousand Fine oz.)	World Million Dollars
1925	2,319	394
1924	2,446	389
1923	2,426	367
1922	2,363	319
1921	2,422	330
1920	2,476	334
1919	2,918	365
1918	3,320	383
1917	4,051	423
1916	4,479	452
1915	4,887	470
1914	4,572	442
1913	4,299	460
1912	4,520	466
1911	4,687	462
1910	4,657	455
1909	4,821	455
1908	4,574	444
1907	4,374	412
1906	4,565	400
1905	4,265	378
1904	3,892	346
1903	3,560	326
1902	3,870	298
1901	3,805	266
1900	3,829	262
1899	3,437	314
1898	3,118	289
1897	2,774	237
1896	2,568	203
1895	2,254	199
1894	1,910	178
1893	1,739	158
1892	1,597	145
1891	1,604	129
1890	1,588	118
1889	1,587	115
1888	1,604	106
1887	1,596	104
1886	1,693	104
1885	1,538	...
1884	1,490	...
1883	1,451	...
1882	1,572	...
1881	1,678	...
1880	1,741	...
1879	1,617	...
1878	1,896	...
1877	2,188	...
1876	2,086	...
1875	1,994	...
1874	1,870	...
1873	1,907	...
1872	1,856	...
1871	1,896	...

(a) Plot the series of gold production against the index of wholesale prices of commodities. Is there a casual relation evident? (b) What effect did the war have on the production of gold? why? (c) What relation to these gold series did the free silver movement have from 1873 to 1900? (d) Did the rising physical volume of business between 1879 and 1896 tend to lessen the adverse effects of the declining production of gold?

812. Corporate Earnings as a Measure of the Volume of Business

Income and Cash Dividend Record

The following traces the growth of Pennsylvania Railroad Company from 1890, showing net income, per cent earned on stock, cash dividends paid and stock range by years:

	*Net Income	% Earned on Stock	Cash Dividend	Stock Range High	Low
1926	$66,939,152	13.41%	†6½%	57⅛	48⅝
1925	62,220,324	12.46	6	55⅜	42½
1924	38,134,677	7.64	6	50	42¼
1923	‡44,857,031	8.99	6	47⅞	40⅞
1922	32,382,058	6.49	5	50	33¼
1921	24,307,669	4.87	4	41¾	32¼
1920	32,801,673	6.57	6	44	37⅞
1919	42,868,098	8.59	6	48½	39⅞
1918	44,070,899	8.83	6	50⅛	43¼
1917	39,281,585	7.87	6	57⅜	40¼
1916	52,276,504	10.47	6	60	55⅛
1915	42,425,322	8.50	6	61½	51¾
1914	34,090,765	6.83	6	57¾	51¼
1913	41,920,833	8.40	6	61⅞	53
1912	42,153,964	9.29	6	63	60
1911	37,531,401	8.27	6	65⅛	59¼
1910	37,990,452	9.21	6	68⅞	63
1909	35,255,188	8.72	6	75⅝	63⅛
1908	28,287,458	8.99	6	66⅛	54½
1907	33,676,993	10.70	7	70⅝	52
1906	35,742,701	11.68	6½	73¾	61⅜
1905	30,238,917	9.99	6	73⅞	65⅞
1904	28,127,267	9.34	6	70	55⅞
1903	27,642,907	9.21	6	78¾	55⅜
1902	27,458,087	13.44	6	85	73¾
1901	23,452,204	11.54	6	81	69
1900	17,998,390	11.88	6	74¾	62¼
1899	11,037,834	8.54	5	70	61
1898	10,697,795	8.27	5	61⅜	55⅜
1897	11,411,914	8.83	5	59½	51⅝
1896	9,823,185	7.60	5	54¾	49¾
1895	10,952,177	8.47	5	57¼	48¾
1894	9,916,072	7.67	5	52⅛	48
1893	10,546,268	8.16	5	55½	46½
1892	10,765,317	8.49	6	57⅜	53
1891	12,323,160	9.72	3	57½	49⅝
1890	11,716,060	9.52	5½	56½	47⅜

* Available for sinking funds and dividends.
† Stock placed on 7% annual rate in October, 1926.
‡ Excluding net credits of $6,681,047 in connection with Federal control settlement.

In addition to cash dividends enumerated the company paid a scrip dividend of 2% in 1893 and a scrip dividend of 3% in 1891.—[From the *Boston News Bureau*, February 24, 1927.]

(a) In what respects is the Pennsylvania Railroad's traffic a good measure of business conditions? (b) Plot the net income of the road against other indexes of business and note the agreements and disagreements. (c) How do changes of freight and passenger rates, consolidations, extraordinary expenses, and strikes affect the earnings? Would you expect the earnings to fluctuate more or less widely than general business? (d) Plot the net earnings against the

average of the highs and lows of the price of the common stock: is there any evidence that the stock market correctly anticipated the earnings of the road? (e) From the Interstate Commerce Commission procure annual or monthly data from 1906 to date on the gross and net earnings of Class I, Steam Railroads. Plot these against other measures of the volume of business. Which is the better measure of business activity—the net or the gross earnings?

813. Clearing House Loan Certificates

On September 20, 1873, the New York Clearing House Association adopted the following resolution:

In order to enable the banks of this association to afford such additional assistance to the business community, and also for the purpose of facilitating the settlement of the exchanges between the banks, it is proposed that any bank in the clearing-house association, may, at its option, deposit with a committee of five persons, to be appointed for that purpose, an amount of its bills receivable, or other securities to be approved by said committee, who shall be authorized to issue therefor to said depositing bank certificates of deposit, bearing interest at seven percent per annum, in denominations of five and ten thousand dollars, such as may be desired, to an amount not in excess of seventy-five percent of the securities or bills so deposited.

Except when the securities deposited shall consist of either United States stocks or gold certificates, the certificates of deposit may be issued upon the par value of such securities.

These certificates may be used in settlement of balances at the clearing-house for a period not to extend beyond the first of November proximo, and they shall be received by creditor banks during that period daily, in the same proportion as they bear to the aggregate amount of the debtor balances paid at the clearing-house.

The interest which may accrue upon these certificates shall, on the first day of November next, or sooner, should the certificates all be redeemed, be apportioned among the banks which shall have held them during that time.

The securities deposited with the committee, as above named, shall be held by them as a special deposit, pledged for the redemption of the certificates issued thereon.

The committee shall be authorized to exchange any portion of said certificates for an equal amount of others, to be approved by them, at the request of the depositing bank, and shall have power to demand additional security, either by an exchange or an increased amount, at their discretion.

The amount of certificates which this committee may issue as above shall not exceed ten million dollars.

This arrangement shall be binding upon the clearing-house association when assented to by three-fourths of its members.

The banks shall report to the manager of the clearing-house every morning at 10 o'clock the amount of such certificates held by them.

That, in order to accomplish the purposes set forth in this arrangement, the legal tenders belonging to the associated banks shall be con-

sidered and treated as a common fund, held for mutual aid and protection, and the committee appointed shall have power to equalize the same by assessment, or otherwise, at their discretion.

For this purpose a statement shall be made to the committee of the condition of each bank on the morning of every day, before the commencement of business, which shall be sent with the exchanges to the manager of the clearing-house, specifying the following items: 1st. Amount of loans and discounts. 2nd. Amount of loan certificates. 3d. Amount of United States certificates of deposit and legal-tender notes. 4th. Amount of deposits, deducting therefrom the amount of special gold deposits.

(a) What was the reason for the following features of this program: (1) Why were the certificates to bear interest? (2) Why were United States government securities excepted from the list against which certificates could be issued to par? (3) Why was the use of the certificates restricted to settling clearing house balances? (4) Why was provision made for substituting other pledges? (5) Why were the certificates in such large denomination? (6) Why was a maximum limit put on the total amount of the certificates which the committee might issue? (7) Was it necessary that the committee know each of the four items named in the last section of the plan? (8) Under what circumstances would a member bank deposit gold certificates with this committee? (b) Did this plan amount to the passage of a legal tender law? If a member bank should have refused to accept the certificates in settlement of a favorable balance at the clearing house, what results would have followed? (c) Was there a pooling of cash in this arrangement? How did the clearing house loan certificates conserve the banks' cash and make it more effective in meeting demands of customers? Is the clearing house loan certificate plan necessarily accompanied by a pooling of the banks' cash?

814. Duration of the Business Cycle

Various generalizations have been made by students of business conditions concerning the duration of the economic cycle or the length of time which usually intervenes between crises or between industrial depressions. The assumption which has received the widest currency is that depressions occur at 10-year intervals. The proponents of the 10-year theory cite in support of their case the crises of 1837, 1847, 1857, and again after the Civil War in the United States the crises of 1873, 1884, 1893, and 1903. Another generalization is that crises, especially those of the last 15 years, have occurred regularly at 7-year intervals. Thus it is pointed out that commercial crises came in this country in 1907, 1914, and 1920.

It has not been proved, however, that the periods between crises have been of uniform duration, and, indeed, one of the most striking and significant things revealed by a careful study of business conditions over

the past 50 years is the relatively short interval from depression to depression.

Evidence concerning the frequency of business depressions—in addition to that furnished by the American Telephone and Telegraph Company's Index, 1876-1923—is offered by the course of commodity prices and money rates since 1890. The intervals between successive commodity price troughs from 1921 to 1914 are, in months: 34, 26, 44, 44, 43, 43, and 36. The intervals between the low points in money rates are harder to determine because of the pronounced seasonal influence, but a study of the movement of interest rates over the past quarter-century shows that periods of cheap money occurred in 1892, 1894-5, 1898, 1900-01, 1904, 1908-09, 1911, 1914-5. . . .

These series reflect very clearly variations in business prosperity, and the most noticeable feature of the curves is their cyclical movement. They, therefore, are well adapted for use in an index designed to show fluctuations in general business conditions. A second noticeable feature . . . is the correspondence of the major wave movements of the two curves. . . .—[Homer B. Vanderblue's, Problems in Business Economics, pp. 18-20, A. W. Shaw Co., Chicago.]

(a) Why, if the determination of the length of the business cycle is a matter of mathematical calculation, should there be disputes as to the length of it? (b) Are business cycles best measured from crest to crest, decline to decline, trough to trough, or recovery to recovery? (c) The precise determination of cyclical movements is complicated by the seasonal variation of the factor; by such unusual events as the violent political campaigns, the declaration of war; and by the inflation of prices. Show why, and give instances. (d) Is it possible for a 40-month cycle to harmonize with a 10-year cycle or a 7-year cycle? (e) Is the typical length of the business cycle a safe method of forecasting business change? do the phases within the cycle have constant length either in number of months or in percentage of the whole cycle period?

815. Severity of Business Cycles in the United States

Business cycles have been more severe in the United States in the past century than they have in any other country. This has been due in a large measure to the rapid exploitation of the rich natural resources of a vast territory, and to the further fact that the inhabitants were largely dependent upon agriculture as a source of their money incomes. The defective banking system doubtless had an influence in causing these crises to degenerate into panics, but the intense periods of prosperity could not have been due to inelasticity of credit, the chief characteristic of the banking system up to 1914. The disappearance of the frontier and the lesser dependence on agriculture would seem to warrant the statement, that causes which initiate peace-time periods of prosperity will be confined largely to mechanical innovations in industry.—[Adams, Economics of Business Cycles, p. 245, McGraw-Hill Book Co., New York, by permission.]

(a) How does the rapid exploitation of our natural resources account for the exceptional severity of our crises? How does our great dependence upon agriculture account for it? How does the defective banking system account for it? (b) In what respect was our banking system defective that it should cause crises to develop into panics? Did the crisis of 1920 develop into a panic, or had the Federal Reserve Act corrected the defect of the banking system? (c) If our dependence upon agriculture yields to an equally disproportionate dependence upon manufacturing will the severity of our depressions be less? or is it meant that diversification of industry will minimize the severity?

816. Futility of Effort to Perpetuate Prosperity through Additional Credit

There are a few paper-money theorists who believe that prosperity could be made a permanent state of business and industry without a consequent crisis if only the supply of money could be increased sufficiently to furnish the necessary purchasing power. Such an unbalanced condition of production and consumption, rising prices, and feverish speculation doubtless could be intensified and prolonged by feeding it upon increasing quantities of value-declining money. But such a state of affairs could be maintained only so long as the prices of consumers' goods could be kept rising as rapidly as the cost of production.—[Adams, Economics of Business Cycles, p. 234, McGraw-Hill Book Co., New York, by permission.]

(a) Is the proposition logical that because rising prices stimulate business, banks should favor rising prices rather than stable or falling prices? (b) What is the ultimate limit on feeding prosperity by additional credit? Did Germany reach it in 1923? (c) In 1919 the indexes of the physical volume of production and distribution indicated a decline was in progress, whereas the sales of producers and distributors were mounting to unprecedented heights. Explain. (d) After the point of maximum capacity of industry and full employment of labor is reached, what effect does further extension of credit by banks to industry have?

817. Restriction of Bank Credit in Periods of Prosperity

When the expansion of prices is fed upon the expansion of bank credit, there is no way to reduce the bank credit without deflating prices. The deflation of prices tends to destroy the soundness of paper upon which the bank credit is based. This being true the margin of soundness of the discounted paper held by banks decreases with the increase in bank credit. Banks should therefore require their customers to increase the collateral security put up with the banks in direct proportion to the increase in the price level. This would be much more effective in holding down bank expansion in times of prosperity than an increasing interest rate.

Banks have to some extent realized the relationship between the ex-

pansion of bank credit and the soundness of discounted paper of their customers. Near the end of the period of prosperity which terminated in 1920, most banks refused to make loans to be used for speculative purposes unless ample collateral security was put up with the banks. But, on the whole, bankers have been slow to curtail loans during prosperity by demanding more and more security behind the loans. Many of them have at such times been willing to make loans on smaller margins of safety, on the theory that the customer could easily sell out and pay off his loans at the bank. Those who do scrutinize more carefully loans during prosperity generally wait until bank credit has about reached its limits of expansion before applying the policy.—[Adams, Economics of Business Cycles, pp. 104-5, McGraw-Hill Book Co., New York, by permission.]

(a) Prepare some formula to guide bankers on collateral merchandise loans or stock exchange collateral loans, by which the margins will be properly increased as the price of the merchandise or stocks or bonds increases. Will it be safe to follow a mathematical formula of this kind? (b) Why does Adams believe this method of restraining credit expansion would be more effective than would changes of the loan rate? (c) At what stage on the upward swing of prices should the principle be first applied?

818. Relative Importance of Primary and Secondary Reserves in Bank Policy

It may be said in defense of using a minimum cash reserve as the maximum limits of credit expansion for banks and governments that it is mathematically definite and easily understood. It is a rule any banker may easily follow and a violation of the rule is easily detected. But, used as the sole check upon expansion, it is economically unsound. Fundamentally, the ability of a bank to pay all of its demand obligations is dependent only to a slight degree upon the actual cash which it has on hand. Its ability to do so will depend largely upon whether it is able to collect the loans which it has made to its customers. After all, the contents of the bills and notes case is far more important than the contents of the cash tills as a measurement of the soundness of the credit obligations of a bank. Also the ability of a government to collect sufficient taxes to liquidate its outstanding obligations is of far more fundamental significance than the amount of gold it has as a reserve behind the paper money.—[Adams, Economics of Business Cycles, pp. 102-3, McGraw-Hill Book Co., New York, by permission.]

(a) Is a bank ordinarily faced with the immediate requirement that it "pay all of its demand obligations"? Is ultimate solvency the prime consideration that should guide the policy of a commercial bank, or is it the adequacy of the cash reserve to meet such demand obligations as are presented for payment? Is it proper, therefore, to minimize the importance of the reserve ratio as a bank guide and

to maximize the importance of the secondary reserve—the contents of the loan, discount and investment pouches?

819. Impossibility of General Over-Production

Many reputable economists have maintained that there can be no general oversupply of goods. They defend their position upon the proposition, sometimes referred to as Say's Law, that demand for goods is always equal to the quantity of goods produced. This proposition is based on the following premises: (1) that all current production will be offered currently on the market; (2) that the only means of payment for goods and services which an individual buys is derived from the payment which he previously received for goods and services he sold; and (3) that all the purchasing power (money) the individual receives for goods and services he sells will be spent by him in purchasing other goods and services. Therefore, the buying world is always able and willing to purchase all—but no more than all—of the goods offered in the markets by the selling world, no matter what the price level may be. There is then, according to this proposition, always a balance between purchasing power of buyers and supply of goods offered by sellers.—[Adams, Economics of Business Cycles, p. 95, McGraw-Hill Book Co., New York, by permission.]

(a) Is this argument accepted nowadays by economists? (b) Does the theorem deny the possibility of overproduction of certain classes of goods? (c) Is the business man satisfied to be able to sell his goods at any price? How does he therefore define "overproduction"? (d) Is the volume of goods currently offered on the market equal to the current output of goods? (e) Are the means with which to purchase the current output just equal to the purchasing power derived from the sale of the current output of goods? How is the equality disturbed by purchases on credit? by sales from stock? (f) When prices are rising there is a strong tendency for the physical volume of output to catch up with the physical volume of sales: why and how? (g) Is the total quantity of purchasing power in a community constant? Is it perfectly transferable?

820. Period of the Business Cycle in the United States 1796-1923

Computations based on business annals.

Counting business cycles . . . as intervals between recessions, noting the quarters in which the turns came, and reckoning to the nearest whole year, we get the following results:

1	cycle	about	1	year	long	(1845-46)
4	cycles	"	2	years	"	
10	"	"	3	"	"	
5	"	"	4	"	"	
6	"	"	5	"	"	
4	"	"	6	"	"	

1	cycle	about	7	years	long	(1815-1822)
0	"	"	8	"	"	
1	"	"	9	"	"	(1873-1882)

In all we have 32 cycles in 127 years, which yields an average length of not quite 4 years. The commonest length is about three years; and two-thirds of the cases fall within the limits of three to five years. There is no indication that the average duration of business cycles is changing. There were 16 cycles in the first 64 years covered by the table (1796-1860) and 16 cycles in the following 63 years (1860-1923). Of 3-year cycles, there were five in the first period and five in the second.—[Thorp, Business Annals, p. 43, National Bureau of Economic Research, Inc., New York City, by permission.]

(a) Why are business cycles measured best from recession to recession rather than from prosperity to prosperity, recovery to recovery, or depression to depression? (b) Different statisticians arrive at different conclusions as to the average length of business cycles: is this due to different measures used, to different conceptions or definitions of the cycle, to the fact that one measures from bottoms, another from tops, another from drops, another from rises?

821. Amplitude of Fluctuations of Index of Trade and Actual Trade

As to the percentage of variation in the volume of trade, as here shown, it should be said that these are obviously the outside limits and quite probably they are far outside; because for the economic contributions of an immense body of the population we have little or no measure at all. Our data give little information as to the month to month activities of the farming population, 30% of the whole country, or of that vast element of professional, domestic, mechanical and public service performed by school teachers, lawyers, doctors, dentists, government employees, domestic servants, traveling salesmen, and a multitude of small lines of manufacture. These are affected little by the ups and downs of trade, and go on from year to year with but scant attention to the "business cycle." Quite possibly we should err if we estimated these activities at a full third, possibly more, of the whole industrial activity of the nation. If therefore we compute that the more vocal lines of activity vary by as much as 10% below or 10% above the computed normal growth, we must recall that these are extreme limits, not to exceed two-thirds of the total activity; and that quite possibly even for this two-thirds the data may be somewhat misleading, inasmuch as we know from the interesting studies of Dr. W. I. King that it is the large establishments from which most of our data are derived, which are affected by trade cycles much more than the small ones. Personally the writer believes that the total variations for the whole country are much nearer 5% above and 5% below than seems to be the general impression.—[C. Snyder, *Journal of the American Statistical Association,* 1924, p. 962.]

(a) For forecasting purposes is it better to have a very sensitive index or an index that changes little, slowly and infrequently? (b)

Are the statistical data used by forecasters in preparing their barometers drawn from cities and industrial centers rather than from the country, from big establishments rather than small, from producers rather than distributors? If so, how does this affect the sensitiveness of the barometers? (c) Examine some of the common measures of business fluctuation—car loadings, bank clearings, pig iron production, power consumption, employment—and note the percentage range of fluctuation. Do they exceed 10%? (d) Similarly examine some of the calculated composite indexes of the volume of trade—Babson's, Brookmire's, Harvard's, the Federal Reserve Board's, the Department of Commerce's, Moody's—and determine whether they fluctuate through a greater range than 10%?

822. Duration of the Business Cycle in the United States and Abroad

	First Half of Period				Second Half of Period			
	Dates	Number of Years	Number of Cycles	Average Duration	Dates	Number of Years	Number of Cycles	Average Duration
France.....	1838–76	38	8	4.75 years	1876–1920	44	7	6.29
Germany....	1848–90	42	7	6.00	1890–1925	35	8	4.38
Austria.....	1866–94	28	5	5.60	1894–1922	28	5	5.60
England.....	1793–1857	64	13	4.92	1857–1920	63	9	7.00
United States	1796–1860	64	16	4.00	1860–1923	63	16	3.94

[Thorp, Business Annals, p. 46. National Bureau of Economic Research, Inc., New York City, by permission.]

(a) Canadian, Australian, and South African cycles conform more to the European length than to that of the United States: can it be said that the shortness of the American cycles is due to the "newness" of the country? (b) Suggest causes for the differences in the following ratios:

	Years of Prosperity per Year of Depression		Years of Prosperity per Year of Depression
England:		United States:	
1790-1925	1.11	1790-1925	1.50
1890-1913	1.24	1890-1913	1.57
1890-1920	1.71	1890-1923	1.79

[Thorp, Business Annals, p. 64.]

(c) The years of prosperity per year of depression, in both the United States and England, throughout the 127 years were very much

more in periods of rising prices than in periods of falling prices: suggest reason.

823. Advertising and the Business Cycle

Major fluctuations in the volume of advertising carried by newspapers and magazines since the war have taken place slightly in advance of similar movements in general business conditions. A relatively small amount of advertising is, of course, carried when business is depressed, and a large amount when business is active; but the beginning of major increases or decreases in the volume of advertising during the five years following the close of the war generally preceded the corresponding upward or downward movement of business. This tendency to precede general business appears at the turning-points of the index of advertising in magazines, and for nearly all phases of the cycle of newspaper advertising.—[Homer B. Vanderblue, Problems in Business Economics, p. 53, A. W. Shaw Co., Chicago, by permission.]

(a) Which fluctuates through the wider range, the volume of newspaper advertising or the volume of magazine advertising? (b) Should advertising be used to stabilize production and distribution? If so, should its volume decline in periods of depression? At present its volume does decline during depression: with what effect on the business cycle amplitude? (c) The volume of advertising in 1919 was excessively heavy, in all fields: how did the federal tax system occasion this?

824. Yield, Price, and Purchasing Power of Cotton

State	Farm Price Dec. 1, 1909-13	Yield 1909-13	Value per Acre 1909-13	Farm Price Dec. 1, 1923	Yield 1923	Value per Acre 1923	Index of Value of Cotton per Acre 1909-13 = 100	Purchasing Power per Acre
	Cents	Pounds	Dollars	Cents	Pounds	Dollars		
North Carolina	12.3	252	31.00	30.8	290	89.32	288	187
Texas	11.8	162	19.12	30.4	146	44.38	232	151
South Carolina	12.4	230	28.52	32.0	187	59.84	210	136
Louisiana	12.0	157	18.84	30.3	125	37.88	201	131
Oklahoma	11.4	164	18.70	29.6	90	26.64	142	92
Arkansas	12.2	183	22.33	31.9	97	30.94	139	90
Alabama	12.4	174	21.58	31.8	91	28.94	134	87
Mississippi	12.6	178	22.43	32.5	89	28.93	129	84
Georgia	12.5	193	24.13	32.0	82	26.24	109	71

[Warren and Pearson, The Agricultural Situation, p. 123.]

(a) Which of these states are the most dependent upon cotton? (b) What factors account for the shifts in yield per acre as among the states? (c) Is the manufacturer or distributor who sells to these

Southern States, more concerned with the price per pound, yield per acre, value per acre, or value of total crop? (d) The southern banker has peculiar credit problems on account of the changes in the value of the cotton crop: suggest what they are with respect to seasonal demand for loans, to cyclical changes in demand, to collateral security for loans, and to the large proportion of the crop that is exported.

825. Measuring Unemployment

What is an "index of employment"? It is a series of figures so constructed that its fluctuations will reflect changes in the *relative intensity* of employment between two points of time, without necessarily measuring the total volume of employment or of unemployment—or even the number of persons totally unemployed. In other words, the index method should yield a continuous curve of employment, the high points of which represent active employment, the low points severe unemployment, and intermediate points the varying degree of seriousness of the problem.

By adopting this simple device we avoid several difficult problems in which we might have become entangled if we had chosen some other objective, such as that of attempting to measure the actual number of unemployed persons. A method followed by more writers than one is to take the "percentages unemployed" reported by trade-unions in certain States, as indicative of the degree of general unemployment. These percentages, multiplied by the total number of wage-earners supposed to be in the country at various Census dates, yield figures which are regarded as the number of persons unemployed at a given time. The results obtained by averaging over a period of time are supposed to give the number (or the percentage) "normally" unemployed in industry. Undoubtedly this method has at least the advantage of simplicity. It involves, however, highly precarious assumptions; the assumption, for example, that the original figures are accurate measures of the amount of unemployment in the unions themselves, and the further assumption that these percentages hold true of the less skilled and very different kinds of labor among wage-earners outside the unions. In the opinion of the present writer, the errors probably involved in the various assumptions underlying this method are so serious as greatly to outweigh the advantage of simplicity.

A much more roundabout method, followed by another writer, is to regard the number of the unemployed as the difference between the "active supply" of urban labor and the "connected demand" for that labor. These two large aggregates are then estimated from data on employment, population, births, deaths, migration from and into the United States as well as between city and country, and other factors. In *conception,* this method is logical; but several of the variables involved are represented, in this country, by such scanty and inaccurate data as to make the solution of the problem by this method indeterminate *in practice.* Indiscriminate patching together of data so diverse in nature and accuracy cannot be expected to yield reliable estimates of either the aggregate volume of employment or of the aggregate of labor-supply. Moreover, the process of subtracting one from the other of these two large and unreliable absolutes magnifies the importance of errors. In other words, the percentage of error in the estimates of unemployment thus derived is likely to be even greater than the percentages of probable error in the two original

quantities.—[Berridge, Cycles of Unemployment, pp. 5-8, Houghton Mifflin Co., Boston, by permission.]

(a) Is an index of employment also an index of unemployment? (b) How is the Index of Employment Agency Operations prepared that is published by the Federal Reserve Board? [See Federal Reserve Bulletin, February, 1924, Vol. 10, pp. 83-86.] (c) What are the composition and method of calculation of the U. S. Bureau of Labor Statistics Index of Employment? (d) What are the composition and method of calculation of the Index of Employment of the Federal Reserve Board? [See Federal Reserve Bulletin, 1923, Vol. 9, pp. 1272-9; 1925, Vol. 11, pp. 326-7, 668.] (e) How is the New York State Employment Index prepared and what does it cover? [See State of New York, Department of Labor, Special Bulletins Nos. 85 and 113.] (f) How does a payroll index differ from an index of employment? from an index of wage scales? Examine the indexes of payrolls prepared by the U. S. Bureau of Labor Statistics, the Federal Reserve Board, and the Industrial Commissioner of the State of New York. (g) How does an index of money wages and an index of real wages differ? [See *American Economic Review,* 1914, Vol. 4, pp. 793-817, and 1921, Vol. 11, 409-26.]

826. Annual Rate of Turnover of Bank Deposits

	1919	1920	1921	1922	1923	1924	1925
Jan.	40.0	45.2	41.9	40.7	42.1	43.0	44.1
Feb.	38.7	42.5	38.1	40.9	43.0	43.9	43.9
Mch.	36.5	41.6	36.0	39.8	41.9	42.2	43.1
Apr.	37.1	41.6	36.2	41.5	40.8	40.9	40.7
May	40.8	40.9	38.0	40.4	41.6	41.0	44.3
June	45.1	40.4	37.8	40.9	42.3	41.6	44.3
July	44.5	40.1	37.4	39.2	39.5	38.8	42.4
Aug.	40.4	37.0	33.5	34.7	35.6	36.5	39.2
Sept.	42.0	39.7	37.9	39.0	39.1	37.5	42.6
Oct.	45.9	43.4	40.5	43.8	40.8	39.3	47.2
Nov.	48.8	45.0	42.4	40.9	43.5	42.3	48.3
Dec.	47.6	45.8	42.6	43.8	46.2	43.6	49.8
Average	42.3	41.9	38.5	40.5	41.4	40.9	44.2

(a) Plot this series against an index of the volume of business. What is the correlation? (b) Why does the velocity of bank deposits measure the degree of business activity? (c) For this purpose why is the rate of 141 cities better than of New York alone? (d) Plot the series against the commodity price level. How does the velocity of deposits affect the price level? [See Fisher's equation of exchange

for mathematical statement of the relationship.] (e) The turnover figures for New York City banks alone in 1925 were as follows: January to December: 87.4, 88.1, 86.5, 79.4, 88.5, 88.9, 82.5, 76.4, 83.6, 93.7, 97.8, 99.3. Why is the turnover of New York banks so much higher than of the average for 141 cities?

827. Dependence of the Business Cycle on Deposit Currency

It is elastic bank credit that is the significant factor in any study of cyclical fluctuations in business conditions; that is, the varying amount of banking funds present at any given time in the cycle. It is evident, from statistical data, that money in hand-to-hand circulation does not vary greatly in volume, but that deposit currency does. Prices and production oscillate necessarily within the limits of elasticity of bank credit. When the supply of elastic bank credit reaches its upper limit, there ensues that check upon rising prices, upon increasing production, and upon growing purchasing power, which marks the culmination of a period of prosperity and the beginning of a depression. Conversely, the thing that makes possible an expansion in business activity is the presence of a supply of elastic bank credit.—[W. C. Schluter, The Pre-War Business Cycle, p. 82.]

(a) In the United States will this bank credit be represented by the volume of deposits in the commercial banks, or in the federal reserve banks, or both? Should circulating notes (national bank notes and federal reserve notes) be added to the deposits? Since the deposits of the federal reserve banks are the reserves of the member banks, what adjustment is necessary in estimating the volume of deposits? (b) Does the volume of deposits of the commercial banks increase earlier than the volume of federal reserve notes, in times of inflation? Does this indicate that the increase in the volume of federal reserve notes is the cause or the effect of the inflation of prices?

828. Commodity Price Index of Business Cycles

Persons (Harvard Review of Economic Statistics, November, 1921, pp. 353-69) analyzed a very large number of price series to test them for a correspondence with the business cycle. He found that the prices of only a few commodities reflect the business cycle. Of ninety-one series he tested, only ten met his requirements of flexibility, sensitivity and conformity to the cycles of business series. These ten were, however, representative of a wide variety of commodities. This ten-commodity (oil, coke, pig zinc, bar iron, mess pork, hides, print cloths, sheetings, and worsted yarns) index is very sensitive indeed to business conditions, and, for the period 1900-1914, showed an amplitude of fluctuations, from peak to trough and trough to peak, ranging from 28 to 51 points and averaging 36 points, compared with a range of 4 to 19 points, and an average of 9 points for the Bureau of Labor index.—[Snyder, Business Cycles and Measurements, 1927, p. 197, The Macmillan Co., New York, by permission.]

The following are the numbers of this price index:

	1919	1920	1921	1922	1923	1924	1925	1926
Jan.	153	212	99	96	128	115	129	128
Feb.	140	204	92	98	133	115	123	123
Mch.	136	199	88	97	139	111	121	118
Apr.	141	190	84	100	137	105	117	114
May	152	180	88	106	125	99	118	113
June	180	168	87	110	118	100	119	116
July	200	156	86	112	111	105	124	...
Aug.	206	155	86	113	111	116	128	...
Sept.	195	157	91	117	117	113	129	...
Oct.	199	141	91	123	112	116	128	...
Nov.	200	123	94	123	112	121	130	...
Dec.	200	102	96	124	112	128	128	...

(a) Plot this series against the indexes of the U. S. Bureau of Labor Statistics, for wholesale prices and for retail prices. Does it forecast the movement of general prices? Of the several groups of wholesale and retail prices composing the indexes, plot some against the Harvard Index and determine whether the Harvard Index precedes the others in its movements. (b) Plot this index against the Federal Reserve Index of Volume of Manufacturing, and the Index of Wholesale Trade (sales). Do changes in the price level lead or lag the volume of manufacturing and of trade?

829. Business Failures and the Business Cycle

The number of failures has grown at an even pace with population, and also with the number of firms in business. . . .

It was stated that the percentages of failures to firms in business are constant only if viewed over a long period. The percentages will fall in years when prices are rising and trade is brisk, when even the badly equipped and inefficient firms can achieve a certain success, and they will rise in years when business turns downward, and depression sets in. An index of business failures becomes an inverse measure of business cycles. . . .

This series does not, however, tell the whole story of business failures, for the liabilities involved in the failures are of far greater importance economically than are the crude numbers or percentages of firms failing. These liabilities are expressed in dollars, and are, therefore, affected by price changes. They are, then, comparable with the dollar totals of bank clearings, which are affected by price changes in much the same way. . . . Liabilities show a very slight secular growth. Charting the ratio of liabilities to bank clearings, however, gives quite a different picture. Here we find that the trend of the total liabilities, expressed in proportion to the amount of business done (bank clearings) has been steadily declining over a period of half a century. . . . The implication of this decline in liabilities is, obviously, that the risk in business has declined to

the same degree.—[Snyder, Business Cycles and Measurements, 1927, pp. 182-3, The Macmillan Co., New York, by permission.]

(a) Plot the various series of business failures [the number of failures, the total liabilities, the ratio of the number of failures to the numbers of firms in business, and the ratio of total liabilities to the volume of bank clearings]. On the same chart plot the *Annalist* index of business activity. In what phase of the business cycle, as shown by the *Annalist* index, is each of the above four series at its highest and lowest point? (b) Is there any evidence in the above series that small business houses are more likely to fail than large? that business is more ably managed nowadays than formerly? (c) Make an estimate of the amount of savings for investment purposes and of the amount of losses involved in business failures. Divide the former by the latter. What is the significance of this ratio?

830. Variability of Interest Rates

. . . the great bulk of loanable funds in the United States is put out at more or less stable rates of interest, stable in the sense that, as a rule, the rates vary slowly over a series of years and show little of the cyclical type of fluctuation. In turn, likewise, the great bulk of bank funds is loaned at rates of interest which vary within rather narrow limits. The rates which vary widely affect a relatively small portion of funds loaned, and the extremely variable rates an extremely small portion. From all this we may formulate a broad law to this effect:

The variability of interest rates, among the different groups or types of funds, loaned, is, broadly speaking, in inverse proportion to the total amounts of the funds involved; that is, the greater the amount of funds loaned in each group, the less the variability, and vice versa.

We may perhaps go a step farther and parallel this law with another, dealing with the time relations of loans, viz.:

The variability of interest rates is, broadly speaking, in inverse proportion to the length of the term of the loan; that is to say, the least variability is in the long-term mortgages and bonds, the extreme of variability in day-to-day call loans.

In quite a literal sense, then, the highly variable rates are on marginal loans, and to a far greater degree, possibly, than has been suspected. . . . —[Snyder, Business Cycles and Measurements, 1927, pp. 217-18, The Macmillan Co., New York, by permission.]

(a) What are the typical and dominant interest rates of the country? (b) How much does each differ from the other in size? in range and frequency of fluctuation? (c) Determine how much influence the variation has on changes in the business cycle. (d) On occasion statisticians have used the yield on bonds as the trend line for measuring the deviations of commercial rates. Suggest an occasion when this would be a useful device. What is the propriety of using bond yield as the normal of commercial rates? (e) Summarize the reasons why

call loan rates vary so widely and so frequently? In what two senses are they "marginal" loans? (f) Looked at from the double angle of volume of loans and of degree of variation, do you opine that interest rates play an important rôle in the causes of the business cycle?

831. Methods of Business Forecasting

Business forecasters attack their problems by one or more of three methods. In the first place, it is possible to select a few specific business conditions, concerning which there happens to be available an adequate amount of information, study the relationship which existed between these specific conditions and the general business trend in the past, and then make forecasts based on the assumption that similar relationships will show themselves in the future. . . .

A second method, more elaborate than the first, is to secure data on a large number of business conditions, reduce the figures to some common basis, eliminate so far as possible the influence of the variation which takes place every year from one season to another, and also the effect of the growth of the country from year to year, and then combine the results into a general average. Comparison of the behavior of such indexes at past periods may, it is claimed by the followers of this system, throw much light on the future. . . .

The third method of forecasting is the method of economic analysis. Followers of this method pay very little attention to the evidence of rhythm in the movement of business, preferring to treat each situation as a new one, and seek to forecast the next situation by a study of the causes at work in the present situation. In theory, this is the most scientific way of attacking any problem. . . .—[Hardy, Readings in Risk and Risk Bearing, 1924, pp. 44-45, University of Chicago Press, Chicago. by permission.]

(a) Name some prominent forecaster that employs each of the methods described. (b) What are the most common factors used in the first method? (c) Name some good composite indexes of business, that is, who prepares and publishes them. (d) How do obscurity of forces working and complexity of data available make the third method extremely difficult? (e) Is any existing mechanical barometer or forecaster dependable? Why? What are the best methods of checking it?

832. Effect of Study of Business Cycle on the Cycle Itself

The measurement of cycles in the volume of trade as variations in the deviations from the persistent and characteristic rate of growth may offer a clue to the nature of business cycles; that is, that prosperous periods represent over-expansion beyond the rate of growth to which that industry has been geared up, and that this results in a breakdown in the balance of production, leading to the phenomena of stagnation and depression.

Whether from all this new knowledge it will be possible to find the one true "cause" of business cycles, if one true cause exists, is a matter of the future. We have had a multiplicity of theories, owing to the

paucity of accurate measurement. Here, as in all scientific investigations, he will be the discoverer who proves. But this much at least seems clear; no industry can long remain widely out of balance with other industries. None can absorb too much save on the penalty of later having too little. Not even the most favoured trade can expand indefinitely, for every boom, as every depression, has to come to an end. Now that we can measure every phase so closely, we shall be able better to calculate, in each industry, the probable demand, and automatically to regulate production to this demand. When we do, to all intents, the business cycle will have disappeared.—[Snyder, Business Cycles and Measurements, 1927, pp. 20-1, The Macmillan Co., New York, by permission.]

(a) If statistical measurements of the business cycle improve and future demand can be predicted with a high degree of accuracy, will the business cycle be eliminated? (b) If only a tolerable degree of accuracy is attained, will the effect of business forecasting be to reduce the business cycle in frequency, amplitude, or universality? (c) Is there any evidence that the cycle is already being tamed by the development of business forecasting? (d) If all the forecasters agree on a certain date that three months hence the price of United States Steel common will decline 20 points, what would happen on that date to the price of the stock? Will not the development of business forecasting add to the sensitiveness of business and make the business cycle changes occur more precipitately and the tenor of business or of the market fluctuate through a wider range?

833. Prerequisites for Effective Control of Business Expansion

First, in order to be able to adopt control methods, business men must have a thorough knowledge of the current internal conditions of their own businesses. This means accurate budget or planning departments and reliable accounting and statistical service. Second, there must also be made available detailed authoritative statistical information concerning the various factors involved in general business fluctuations. Third, most business men must be able to interpret, in particular relation to their own business, the general statistical information made available for forecasting the future trend of business. And, fourth, business men must be willing to control their business enterprises when an upward movement in business begins so that they will not be placed in conditions of inflation. Before private control can ever succeed in eliminating business cycles business men must make a concerted effort to prohibit inflation rather than an effort to "play the game" of speculation and "get out from under" before the crash comes.—[Adams, Economics of Business Cycles, pp. 247-8, McGraw-Hill Book Co., New York, by permission.]

(a) What are the functions of cost accounting? Does it help prevent over-expansion? (b) What is meant by "budget" for a business concern? (c) What are the sources of the statistical information for business houses? (d) What is the interpretative service of the business forecasting organizations, such as Brookmire's? (e) Is the

recent growth of use of statistics by business houses likely to reduce the frequency, or the severity, or both, or neither, of business cycles?

834. European Depression Following the War

"Explain one of the greatest paradoxes which contemporary European economics offer: workmen are idle, machinery is idle, and the real lack of raw material does not impress itself upon us as it would if all hands were employed. It looks as if there is plenty of consumers' goods; the well-to-do do not deny themselves very much, the middle class has a higher standard of living than fourteen years ago, and even the unemployed do not hunger. We maintain our standard of living."—[*Economic Journal,* March 1927, p. 30.]

CHAPTER XXVII

FINANCIAL PANICS

835. Difference between Crises and Panics

A business crisis is the time when business passes through the critical and dangerous period of rapid liquidation. The word is applied to business in the same sense as a physician applies the word to a patient who is suffering from a dangerous disease. The crisis is the stage of the disease when the patient is most likely to die. If he succeeds in weathering this stage, his condition improves and his life becomes more assured. For business enterprises, a business crisis is the most dangerous period of the business cycle; it is then that they are most likely to be forced into a failing condition.

Panics are simply aspects of intensified crises, but do not occur with each crisis. The word panic carries with it the meaning of lack of reason, action based upon emotion or instinct. The individual who is in a panicky condition has little control over his acts. The word as applied to business conditions means that business men and the public in general have become so excited over a business crisis that they act in an unreasoning manner with particular reference to money and credit. Panics are evidenced by runs on banks, denial of credit by banks to business organizations which are deserving of credit, and exorbitant interest rates. Business may go through a crisis without a consequent panic. Panics simply intensify business crises, and they are largely due to defective banking and credit systems and politics.—[Adams, Economics of Business Cycles, pp. 38-39, McGraw-Hill Book Co., New York, by permission.]

(a) Is the above distinction the same as the distinction between "industrial crises" and "financial panics"? (b) Is "panic" possible in anything else than "finance"? (c) In what phases of the business cycle have "panics" been known to occur? (d) Is "crisis" the same as "financial strain" which does not necessarily break in "panic"? (e) Cite some "crises" that were not accompanied by "panics."

836. Cause of the Panic of 1907

The conditions which led to the panic of October and November, 1907, were not due to the failure of a few individual banks. They were not due to the lack of confidence of the people in the banks, but more to a lack of confidence of the banks in themselves and their reserves. Banks have been fearful that the reserve system would break down, and in consequence it has broken down, and the reserve deposits have been only partially available. They were also fearful that not sufficient currency could be supplied to meet the demand, and as they all made the demand at once, there has not been sufficient currency. The result has been a currency famine.—[Report of the Comptroller of the Currency, 1907, p. 71.]

(a) Is this a fair, partial, or complete explanation of the panic of 1907? (b) How would a central bank have improved the situation? Would it have kept reserves more available? Would it have given elasticity of credit in emergency? How?

837. Corporate Listings on New York Stock Exchange

	Issued for New Capital, etc.	Old Issues Now Listed	Replacing Old Securities	Total
BONDS*	$	$	$	$
1926	852,762,800	.....	238,906,200	1,091,669,000
1925	1,030,620,216	25,107,500	520,514,391	1,576,242,107
1924	597,242,100	36,623,489	406,587,832	1,040,453,421
1923	637,040,556	11,962,400	619,351,290	1,268,354,246
1922	867,634,961	15,979,350	698,808,139	1,582,422,450
1921	525,652,059	44,055,900	226,202,119	795,910,078
1920	388,708,500	4,564,300	45,621,906	438,894,706
1919	211,074,311	41,795,500	68,132,729	321,002,540
1918	100,148,400	33,958,500	93,527,800	227,634,700
1917	713,686,300	64,445,000	212,702,200	990,833,500
STOCKS				
1926	1,421,884,695	687,584,274	1,601,981,439	3,711,450,408
1925	1,060,308,991	344,713,098	1,295,985,711	2,701,007,800
1924	625,206,192	286,501,896	1,020,605,601	1,932,313,689
1923	917,756,584	346,922,069	1,346,405,054	2,611,083,707
1922	981,900,977	335,061,654	1,467,062,739	2,784,025,370
1921	368,755,100	249,931,033	481,037,553	1,099,723,686
1920	1,131,237,916	343,522,220	680,638,517	2,155,398,653
1919	565,615,760	236,060,904	464,957,828	1,266,634,492
1918	160,688,267	44,652,250	106,684,130	312,024,647
1917	616,957,245	139,877,552	724,450,548	1,481,285,345

* Covernment issues foreign and domestic not here included, shown separately.

[*Commercial and Financial Chronicle.*]

(a) How does this series of corporate listings on the New York Stock Exchange vary with the volume of sales on the exchange? with the index of stock prices? (b) What is meant by "undigested" securities? In what phases of the cycle are they likely to arise? What effect do they have on the severity of the financial panics? (c) How do bankers gauge the rate at which securities can be absorbed by the public? What relation does this rate bear to the volume of savings of the people? (d) Is it possible by inflation of the volume of bank currency to provide a bigger market for bonds? Was this done in case of the Liberty bonds? (e) Are corporate listings an accurate measure of the supply of securities?

838. The Banks in the Panic of 1857

The suspension was preceded by a desperate struggle between all the banks themselves, and distrust and fear of currency was more apparent

among them than with the public generally. The banks began a savage contraction, being in no position whatever to meet the crisis by bold loans to solvent borrowers. It was afterwards said, with great good reason, that the panic was entirely unnecessary and need not have occurred, but the banks put all the pressure on their loans to merchants because they could not recall those to the railroads.—[Sumner, History of Banking in United States.]

(a) How great was the expansion of railroad mileage between 1850 and 1857? Where were the new securities marketed? Why did the banks help carry them? Did this cause expansion of bank notes? (b) The volume of merchandise imports was very large in 1856-7: why did this tend to reduce the gold in the New York banks, but increase that in the sub-treasury? How did the Treasury disgorge its cash into the market? (c) Is there evidence in the above quotation of the need at this time of a central bank?

839. Peculiarities of the Panic of 1884

Notwithstanding the liberal issue of loan certificates, the banks contracted their loans to a noticeable extent, from $333,000,000 on May 10 to $313,000,000 on May 24. That this contraction was not accompanied by extraordinarily high rates for loans except during the very height of the panic may be explained by the entrance of country banks into the market for commercial paper from which the New York banks had virtually withdrawn. (*Commer. and Finan. Chronicle,* May 31, 1884, p. 632.)

Further evidence of the strain upon New York banks is afforded by the two returns of the national banks to the Comptroller of the Currency on April 24 and June 20. As the first of these returns was made before the crisis, while money was coming to New York from the country, and as the second was made after withdrawals had ceased and money had begun to be sent back to New York, they may be taken to represent, at least roughly, the changes in the amount of bankers' balances due to the crisis. The following table shows the principal items of reserves and liabilities of the New York national banks on the dates mentioned above:

(000,000 omitted)

	April 24	June 20
RESOURCES		
Loans	$250	$209
Due from banks	20	19
Clearing-house loan certificates	..	10.3
Clearing-house exchanges and cash items	64	53
Cash reserve	74	67
LIABILITIES		
Individual deposits	231	203
Due to national banks	95	71
Due to other banks	37	28
Clearing-house loan certificates	..	11.9

This table shows changes which are unlike in many respects those which occurred in the crisis of 1873 and, as we shall see, unlike those in later crises. In the first place, it will be observed that while the reduction in bankers' deposits was large, amounting to $33,000,000, on the other side of the account the banks experienced a loss of cash of only $7,000,000. This seeming contradiction of the view so frequently expressed in these pages that bankers' deposits are reduced primarily by withdrawals of cash requires explanation. In this particular instance the out-of-town banks lent largely in the New York market, and the credits thus secured by borrowers would serve to diminish bankers' deposits and increase individual deposits, which would then be canceled by the liquidation of New York bank loans. That this was the case is evident from the slight change in the amount of individual deposits, there being a reduction of only $28,000,000, while the diminution in loans and clearing house exchanges amounted to $52,000,000. The shifting of loans from the New York banks to the out-of-town banks would result in large unfavorable balances for those banks holding large bankers' deposits, unless the borrowers from the country banks also happened to be depositors with them. The disturbance due to the shifting of loans would, however, be much less than when the country banks actually withdrew funds, since the unfavorable clearing-house balance could be met by the resort to clearing-house loan certificates. After this explanation, it will cause no surprise to find that the greater part of the certificates taken out, aside from those issued for the Metropolitan Bank, were taken out by the banks having large bankers' deposits. Only 20 of the 82 clearing-house banks took out certificates, and several of the banks did not use them. It was because the strain remained purely local that the use of loan certificates alone proved sufficient to meet the emergency.—[Sprague, History of Crises, pp. 116-19.]

(a) Why is this called a "bankers' panic"? (b) Develop Sprague's argument why only banks having bankers' balances had occasion in this panic to use clearing-house loan certificates?

840. Relation of the Currency Question to the Panic of 1893

Following the stock market collapse of May 4 the market was irregular and dull throughout the remainder of the month. The lending rates of the banks were moderate, but a further decline in the volume of loans continued, and on May 27 they stood at $415,000,000, some $10,000,000 less than at the beginning of the month. In the meantime, the banks had been receiving large amounts of money from the interior, and notwithstanding continued gold exports, the reserves rose from $121,000,000 to $134,000,000. The position of the banks, therefore, at the end of May had distinctly improved; they were, in fact, stronger than at the same time in the previous year, as is evident from the following table:

NEW YORK BANK STATEMENT

	May 27, 1893	May 28, 1892
Loans	$415,801,000	$488,000,000
Deposits	436,724,000	536,000,000
Reserve	134,621,000	158,000,000
Surplus reserve	25,439,000	24,600,000
Per cent of reserve	30.82	29.58

During the following week there was a loss of $5,700,000 in reserves, principally on account of gold exports, which excited no particular alarm, but the loss for the week ending June 10 was not only more considerable—nearly $10,000,000—but it was also the beginning of an entirely new stage in the crisis. Up to this time receipts of cash from the interior had been fairly large. For the week ending June 2 the reported movements of money between the New York banks and the interior showed a net gain of $2,500,000; but the following week shipments were over $8,000,000 and were nearly as much for the week ending June 16. In the three weeks ending with June 17 the reserve of the New York banks was reduced from $134,000,000 to $110,000,000 and the surplus reserve fell from $24,600,000 to $8,700,000.

The cause of this abrupt change was certainly not in any definite way connected with the silver situation. Information that the administration would move for the repeal of the Sherman silver purchase act had already been made public. The withdrawal of money from New York was directly due to the failure and suspension of large numbers of banks, both state and national, and of private bankers in the West and South. Nineteen national banks were placed in the hands of receivers during May and June, and the number of state and private banks which fell was even greater. The causes of these failures were in most instances, as was pointed out by the Comptroller of the Currency, due to "violations of law and imprudent methods of banking, and the closing of them was only hastened by the general condition of financial affairs. Some failed because of criminal acts on the part of the officials in charge and others because of the lack of proper comprehension of the purposes of a bank." (Report of the Comptroller of the Currency for 1893, p. 10.) Quite apart from mismanagement it was inevitable that some banks should have gone to the wall in consequence of the many mercantile failures, 3,401 in number, with liabilities of $169,000,000, which occurred during the period from January to July, 1893. These failures exceeded both in number and in the amount of liabilities those which had occurred in any other period of equal length in our history. Bank suspensions were almost as numerous as bank failures and seemed to have been due to a greater variety of causes. In some instances banks were forced to suspend temporarily because of the distrust excited by the failure of banks in their neighborhood. In other instances it was on account of the distance which separated banks from their reserve agents. (For a list of suspended banks, with dates of suspension and resumption, see Comptroller's Report for 1893, p. 78.)

In the eastern money centers bank failures and suspensions were attributed almost entirely to the silver influence. But it is to be noted that they occurred principally in the West and Southwest, where there is no evidence that people were distrustful of silver money. Had the monetary influence been potent, we should expect to find numerous failures in the eastern States and also some discrimination on the part of depositors between the different kinds of money in circulation. Distrust of the solvency of the banks rather than dissatisfaction with the circulating medium was clearly the direct cause which brought about runs upon banks and the numerous failures and suspensions.

So far as the national banks were concerned it mattered little that the relative number of disasters among them was considerably less than among state institutions. The spread of distrust and the contagion of

panic are essentially products of unreasoning fear. Moreover, the national banks of the cities held large balances of state as well as of national banks, and to call home some portion of these balances was in the circumstances the natural and proper course for the country banks.—[Sprague, History of Crises, pp. 167-70.]

(a) What was the condition of the balance of trade each month of 1892 and 1893? Why was it such an important factor at this particular time? (b) What were the provisions of the Sherman Compulsory Silver Purchase Act of 1890? What effects were under way during 1891, 2, and 3? (c) How was the system of redeposited reserves bound up with the stock market at this time? (d) According to Sprague, why did the movement of funds from New York City to the interior banks take such a sudden expansion in June 1893? Does it appear to have been due to the Silver Purchase Act?

841. Currency in the Panic of 1908

The Clearing House Association furnished the Comptroller with data as to the use of clearing house certificates during 1907. In a summary of the returns from inquiries as to the issue of certificates, it is stated in part—

> In the larger clearing houses the certificates were issued, with but few exceptions, for the sole purpose of settling balances between the banks and the clearing houses. In other places the certificates were in a number of cases pledged for checks or notes of small denominations meant to serve as currency for general circulation. In still other localities no certificates were issued at all, but cashier's checks for small uniform amounts, or checks authorized by the clearing house, or banks associated, were issued to provide funds for pay rolls, etc. . . . Clearing-house certificates and checks were not the only form of currency issues, as some of the railroads and industrial corporations issued checks of larger or smaller denominations in making payments to their employees during the period of extreme stringency and while hoarding was still being practiced, and some of these checks passed current and acted as substitutes for currency for the time being.—[Report of the Comptroller of the Currency, 1908, p. 64.]

(a) Was the issue of checks for purpose of general circulation legal? If so, why do not the national banks evade the restrictions on national bank notes by issuing checks that will circulate freely, either singly or by associated action of several banks? (b) Why was there a dearth of currency in the height of the panic? What was meant by the "premium on currency"? (c) If, as stated, "certificates were in a number of cases pledged for checks or notes of small denominations meant to serve as currency for general circulation," trace the security behind these circulating checks or notes. (d) What is the great objection to currency issued by non-banking or non-governmental institutions?

842. The Cycle of Bank Failures

(In thousands of dollars)

Year	No. of Failures	Capital	Nominal Assets	Liabilities	Dividends Paid to Creditors
1864	2	$	$	$	$ ....
1865	5	125	245	225	145
1866	5	275	1,206	890	....
1867	3	260	222	138	138
1868	7	276	182	148	....
1869	6	100	77	361	82
1870	1	....	....	50	....
1871	7	220	2,314	2,654	974
1872	10	470	2,126	3,059	1,906
1873	33	907	4,644	6,938	3,420
1874	40	770	4,125	4,562	2,022
1875	14	2,413	9,190	12,365	4,143
1876	37	961	7,312	9,206	5,178
1877	63	2,491	13,137	15,223	7,004
1878	70	3,250	26,001	27,269	19,485
1879	20	1,370	5,102	5,253	4,235
1880	10	452	1,629	1,311	288
1881	9	436	585	1,785	851
1882	19	545	2,765	2,608	1,221
1883	27	870	2,813	3,193	1,408
1884	54	1,718	12,900	15,508	9,671
1885	32	1,099	2,982	4,883	2,361
1886	13	254	1,300	1,140	693
1887	19	931	2,865	3,074	1,610
1888	17	745	2,805	3,342	1,924
1889	15	363	1,279	2,147	1,025
1890	30	2,169	10,692	11,385	3,884
1891	44	2,071	7,190	6,365	3,090
1892	27	578	2,719	3,227	803
1893	261	16,641	54,828	46,766	17,912
1894	71	3,112	7,958	7,218	1,456
1895	115	3,906	11,275	9,010	2,251
1896	78	3,400	10,240	7,513	534
Total	1,164	53,187	212,725	218,833	99,711
Not dated	70	445	1,586	1,796	377
	1,234	53,632	214,312	220,629	100,088

(a) Determine the relation of bank failures to the business cycle. (b) As the panic and depression proceed, does the size of the banks failing grow greater or less? Explain why. (c) Plot the above series on ratio paper. How do the slopes of the curves compare? Explain the meaning. [For missing figures take average between those of the nearest year.] (d) If the above curves of "liabilities" and "dividends

paid" become more parallel, does it indicate anything as to the efficiency of bank supervision or as to the efficiency of the liquidation process? Which of the two curves is the more stable? Why? (e) Compute the ratio of "capital" to "liabilities," and plot it against "dividends paid," on ratio paper: to the degree that the curves are parallel what is shown?

843. Precipitancy of Price Decline during Business Recessions

Under conditions of great inflation of prices and strain of credit, there cannot be a slow liquidation of value. The fact that all business is organized for profits, and the further fact that self-protection is one of the primary instincts of all mankind (including business men) would make such a slow movement impossible.—[Adams, Economics of Business Cycles, p. 179, McGraw-Hill Book Co., New York, by permission.]

(a) When prices are declining why does each business man dump his goods precipitately? Why do other business men reduce their purchases to a minimum? (b) How does the desire of bankers to protect themselves at such times force goods onto the market and lower their prices? (c) In this decline of prices who takes the loss of value, the business man or the banks? Which is the more able to take it? (d) Do banks force all their borrowers to liquidate their stocks of goods and pay their debts to the banks? what ones are exempted, if any? What is a "frozen loan"? (e) In the decline of prices why do retail prices fall more slowly than wholesale? why do raw materials fall more rapidly than general wholesale prices? (f) In the depression of 1920-22 agricultural prices declined further and stayed down longer than other prices: why? (g) Interest, rents and wages decline much more slowly than do retail prices: account for these lags.

844. The Extent of Liquidation during Depression

The extent of liquidation following a period of prosperity will depend upon the degree to which a market oversupply will persist. The magnitude of the market oversupply will depend directly upon the following factors: (1) the extent to which the use of credit made possible the price rise; (2) the quantities of surplus goods in the hands of business enterprises at the beginning of liquidation; and (3) the extent to which the price and value system is upset by the process of liquidation.—[Adams, Economics of Business Cycles, p. 186, McGraw-Hill Book Co., New York, by permission.]

(a) How can each of the above factors be statistically measured? (b) What is the Babson "area theory"? (c) Must all the credit expansion upon which the expansion fed be utterly liquidated before recovery sets in? May business adopt a policy of greater use of

credit? (d) During a period of prosperity there is a tendency for maladjustments to increase in a direct ratio to the increase in the use of credit. Does this account for the severity of the depressions of 1837, 1857, 1873, 1893, 1907 and 1922? (e) Moody's Investors Service emphasizes from time to time the point that a business reaction is unlikely, if not impossible, unless there is a noteworthy accumulation of inventories of goods or securities. What is the logic of this position? (f) The liquidation process may be stopped by some fortuitous event such as the declaration of war, or the reversal of the balance of trade to a favorable position. Give instances in American history.

845. Use of Clearing House Loan Certificates by New York Clearing Banks

Eleven million two hundred and thirty-five thousand dollars in certificates were issued to take up the participating receipts given for loans advanced from October 19th to October 26th, and the interest due for such advances was included in the first distribution of interest on the 15th of the following month.

Until near the retirement of all but a small portion of certificates issued, your committee met on the morning of every business day and frequently after noon, at least three members always being present and generally all of the Committee.

The date of the first issue was October 26th, 1907
The date of the first cancellation was November 14th, 1907
The date of the final issue was January 30th, 1908
The date of the final cancellation was March 30th, 1908
Gross issue, $101,060,000

Maximum amount outstanding was $88,420,000, Dec. 16th, 1907.

During this period, there passed through the hands of the Committee. including original deposits of securities, substitutions of securities (both withdrawals and deposits) collateral aggregating in amount $453,000,000 of which $330,000,000, or 72.92% consisted of commercial paper and $123,000,000 or 27.08% was made up of stocks, bonds, and short time railroad and other similar notes.

Of the 52 banks constituting membership in the Association, 32 took out loan certificates, from whom was received in interest, $1,116,245.83, which amount of course, was paid to banks holding said certificates.

3,548 loan certificates were issued as follows:

412	@	100,000	each,	$41,200,000
522	@	50,000	"	26,100,000
1005	@	20,000	"	20,100,000
1123	@	10,000	"	11,230,000
486	@	5,000	"	2,430,000

The greatest amount of certificates issued to any one bank was $17,000,000 and the smallest $250,000, the latter amount in two cases.

The time elapsed from the first issue, October 28th, 1907, to the

final cancellation, March 28th, 1908, was 22 weeks or 154 days, as compared with 19 weeks or 133 days in 1893.

The percentage of maximum amount of certificates outstanding December 16, 1907 ($88,420,000), to total net deposits of Clearing House Banks ($1,066,865,900), was 8.28.

The percentage of aggregate amount of certificates issued ($101,060,000) to deposits as above, was 9.38.

Table showing use of Loan Certificates in paying balances at the Clearing House:

1907	Total Balances	Loan Certif's Paid in	Per Cent
*Oct.	$ 64,648,593	$ 54,460,000	0.84
Nov.	218,702,635	211,475,000	.96
Dec.	203,340,855	198,200,000	.97
1908			
Jan.	337,895,293	64,575,000	.19
Totals	$824,587,376	$528,710,000	0.64

[Report, Loan Comm., N. Y. Clearing House Assn., 1907-8.]

(a) The above statements cover the issue of clearing house loan certificates by the New York Clearing House in the 1907 panic. Why did the per cent of total balances paid by clearing house loan certificates increase during October, November, and December? (b) Why would a bank take out loan certificates and not use them? (c) What are the different ways of measuring the degree of usefulness of loan certificates?

846. The Use of Clearing House Certificates in Panics of 1893 and 1907

Issues of the New York Clearing House Association:	1907	1893
Aggregate certificates authorized	$101,060,000	$41,490,000
Maximum amount outstanding at any one time	88,420,000	38,280,000
Highest aggregate amount issued to any one bank	17,000,000	4,000,000
Lowest amount issued to any one bank	250,000	100,000
Average amount issued per bank proportioned to entire membership of association (52 banks in 1907; 65 in 1893)	1,943,461	638,307
Average amount issued per bank proportioned to those institutions that took out certificates (32 banks in 1907; 38 in 1893)	3,158,125	1,091,842
Number of banks taking out certificates	32	38
Number taking none	20	27
Certificates first issued	Oct. 26	June 1
Certificates last issued	Jan. 30, 1908	Sept. 6, 1893
Final cancellation	Mar. 28, 1908	Nov. 1, 1893

[Report of the Comptroller of the Currency, 1908, p. 65.]

(a) Do the above facts measure the severity, relatively or absolutely, of the panics? (b) Formerly in case of panic, was it wise for a bank to take out such certificates whether it would apparently need them or not?

847. Central Bank Control of Credit Cycle

Show how the possibility of effective central bank control of the credit cycle is determined by the following factors [See T. E. Gregory, What Can Central Banks Really Do? *American Economic Review*, March, 1925]:

I. Environmental Conditions: (a) Whether the central bank is the marginal lender of funds at the time, or can through open market operations put itself in that position in a short time? (b) Whether the monetary standard is favorable, an effective metallic standard being inconsistent with price control, whereas some inconvertible paper currency systems admit of price control. (c) Whether the banking system is a branch banking system or a unit banking system. (d) What reserve requirements are laid upon the central bank by law and business sanction?

II. Technique, or Methods of Control: (a) Whether the bank can manipulate the rate of discount effectively. (b) Whether it can operate in the open market effectively. (c) Whether it can ration credit. (d) Whether it can exercise moral pressure.

III. Price Policies: (a) The dependence of the price structure upon the volume of bank loans. (b) The dependence of the volume of loans upon the interest rates.

848. Effect of Declaration of War on the Bank of England

ACCOUNT OF THE BANK OF ENGLAND FOR THE WEEKS ENDING JULY 29 AND AUGUST 7, 1914

ISSUE DEPARTMENT

Liabilities	July 29	Aug. 7	*Assets*	July 29	Aug. 7
	£	£		£	£
Notes issued	55,121,000	44,491,000	Government debt	11,015,000	11,015,000
			Other securities	7,434,000	7,434,000
			Gold coin, bullion	36,671,000	26,041,000
			Silver bullion	.....	.....
Total	55,121,000	44,491,000	Total	55,121,000	44,491,000

BANKING DEPARTMENT

Proprietors' capital	14,553,000	14,553,000	Government securities	11,005,000	11,041,000
Rest	3,491,000	3,547,000	Other securities	47,307,000	65,351,000
Public deposits	12,713,000	11,499,000	Notes	25,415,000	8,385,000
Other deposits	54,418,000	56,749,000	Gold, silver coin	1,460,000	1,580,000
Seven-day, other bills	10,000	10,000			
Total	85,187,000	86,359,000	Total	85,187,000	86,359,000

(a) On August 1 the Bank rate was raised to 10%; the Bank holiday, Monday the 3rd, was extended to Thursday. What was the purpose of these acts? (b) What is the meaning of the drop in notes of the Issue Department of ten and a half millions? (c) What item on the assets side shows a similar drop? why? (d) Did the Banking Department redeem any of its notes at the Issue Department? What is the significance of the increase of "Other securities"? Did the Banking Department put its notes into circulation? What is the significance of the fact that the "Gold and silver coin" of the Banking Department remained intact? (e) Calculate the "proportion" (the reserve ratio) for the two dates. (f) After August 6, the statement of the Bank of England became more and more unintelligible: why?

849. Clearing House Loan Certificates of New York Clearing House in 1884

Sample:

No. 0000 $10,000

Loan Committee of the New York Clearing-House Association

"This certifies that the.....National Bank has deposited with the committee securities in accordance with the proceedings of a meeting of the association held May 14, 1884, upon which this certificate is issued. This certificate will be received in payment of balances at the clearing-house for the sum of ten thousand dollars from any member of the Clearing-House Association. On the surrender of the certificate by the depositing bank above named, the committee will indorse the amount as a payment on the obligation of said bank, held by them, and surrender a proportionate share of collateral securities held therefor.....

Committee."

.....

The resolution adopted May 14, which is referred to in the above certificate was as follows:

"*Resolved*, That, in view of the present crisis, the banks in this association, for the purpose of sustaining each other and the business community, resolve:

"That a committee of five be appointed by the chair, to receive from banks members of the association bills receivable and other securities to be approved by said committee, who shall be authorized to issue therefor to such depositing banks certificates of deposit bearing interest at six per cent. per annum not in excess of 75 per cent. of the securities or bills receivable so deposited, except in case of United States bonds, and said certificates shall be received in settlement of balances at the clearing house."

The "present crisis" was described as follows:

"The suspension of the Metropolitan National Bank on May 14 caused great excitement. All stocks and securities called upon the New York Stock Exchange were greatly depreciated under the pressure to sell, and it was practically impossible for the banks to collect their call loans, as their borrowers could not obtain money by sale of their securities except at ruinous rates; neither could they borrow elsewhere; and it was impracticable and impolitic to throw the mass of securities held as collateral to the call loans of the associated banks upon the market. If it had been done it is probable that a suspension of gold and currency payments by the banks throughout the country would have followed the general panic that would have ensued."—[Report of the Comptroller of the Currency, 1884, p. 36.]

(a) This panic of 1884 was rather financial than commercial or industrial. Why? (b) In your opinion was the 25% margin of security on the loan certificates large enough under the circumstances of the hour? What margins do the bankers nowadays ask on collateral loans in normal times? (c) Is it a warrantable statement to say that the associated banks created an artificial market for the securities of the endangered banks? (d) Show that the loan certificate plan was necessitated by the lack in the United States of a discount market and central bank. (e) Why would the sacrifice of securities on the stock exchange have probably caused a "suspension of gold and currency payments by the banks throughout the country"?

850. Relation of the Federal Reserve to Speculation

It is not the duty of the Federal Reserve System to undertake to regulate stock or other speculation or to interfere unnecessarily in the affairs of their member banks. But it is well to recall that the Federal Reserve System was not established to provide a life preserver for the speculator. It was set up as an aid to industry, agriculture and commerce. It is a system of liquid productive credits. The use of Federal Reserve credit for speculative or investment purposes is precluded by specific provisions of the Federal Reserve Act. It is clear, therefore, that no bank has a proper status as an applicant for Reserve bank accommodation, which is supplying credit for speculative uses. It is the duty of the Federal Reserve banks to hold true to the course plotted for them in the fundamental provisions of the Federal Reserve Act.—[Speech, A. C. Miller, as reported in the *Commercial and Financial Chronicle,* November 28, 1925, by permission.]

(a) Give instances when this attitude of the Federal Reserve Board are plainly evident in the actions taken by it. (b) Taking a chart of the price of wheat and of corporate stocks, pick out the dates when prices were highest and determine from the Federal Reserve Bulletin whether the Federal Reserve Board took any action at stopping the upward movement of prices.

851. Reserve Bank Acts to Reduce War Inflation

ESTABLISHES HIGHER DISCOUNT RATES ON BORROWINGS OF MEMBERS TO PREVENT USE OF FUNDS FOR SPECULATION

Call Market Is Erratic

Rates Fluctuate Widely, With Renewals at Highest Point Reached This Year

The Federal Reserve Bank of New York yesterday took the first step toward bringing about a reduction of the great volume of banking credit created during the emergency period of war finance by establishing a higher range of discount rates, chiefly on member bank borrowings at the central institution against government war paper.

Benjamin Strong, governor of the bank, in announcing this important step, which many bankers believe will have the effect of starting general deflation of the enormously expanded credit structure of the country, said:

REASON FOR ACTION

"The reason for the advance in rates announced today by the Federal Reserve Bank of New York is the evidence that some part of the great volume of credit, resulting from both government and private borrowing, which war finance required, as it is released from time to time from government needs, is being diverted to speculative employment rather than to the reduction of bank loans. As the total volume of the government's loans is now in the course of reduction, corresponding reductions in bank loans and deposits should be made in order to insure an orderly return of normal credit conditions."

In effect the increase in discount rates at the Reserve Bank means that member institutions seeking to borrow at that bank against United States certificates of indebtedness, Liberty bonds or Victory notes must in the future pay a higher rate for this accommodation. In other words, the spread between the rate charged by the member banks for carrying purchasers of Liberty bonds or between the interest rate of the government issues and the discount rate of the Reserve Bank has been narrowed, while the differential between the bank rate on government paper and on the commercial discount rate of the bank has been reduced. This move is possible at this time, since there is no longer any reason for giving preferential rates on borrowings at the bank against war paper, as the government has ceased borrowing on such a huge scale as during the war.

The following table gives the new discount rates of the Reserve Bank, effective immediately, and the old rates which are superseded:

ADVANCES	New Rate	Old Rate
For advances not exceeding fifteen days to member banks on their promissory notes secured by (a) United States certificates of indebtedness, Liberty Bonds, Victory notes and customers' notes secured by any of the foregoing	4½	4
(b) United States certificates of indebtedness bearing 4¼ per cent interest	4¼	4
(c) Eligible commercial paper	4¾	4

Rediscounts	New Rate	Old Rate
For notes, drafts and bills of exchange having a maturity at time of rediscount of not more than ninety days	4¾	4¾
(Including rediscounts for periods not exceeding fifteen days of eligible paper having a maturity at time of rediscount of more than fifteen days)	4¾	4¾
For notes, drafts and bills of exchange having a maturity of not in excess of ninety days secured by Liberty bonds or Victory notes	4½	4¼
For trade acceptances and bankers' acceptances having a maturity at time of rediscount of not more than ninety days	4½	4¼
For agricultural paper having a maturity at time of rediscount of more than ninety days but not more than six months	5	5

The action of the local Reserve Bank is expected to be followed by similar action by the other eleven Reserve institutions and is in line with the policy of the Federal Reserve Board toward checking a further expansion of banking credit, particularly where such expansion is an aid to speculation.

Renewals at 10 Per Cent.

The Wall Street money market yesterday was one of the most erratic in weeks. Rates for call loans fluctuated so widely that not only was the year's high level for renewals, 10%, duplicated, but a new low record for the year of 2% was also established.

In all, more than $40,000,000 was loaned on call on the exchange, of which all but $3,000,000 went at the 10 per cent rate. In the afternoon, when the demand has been satisfied, the rate declined sharply, getting down for a moment to the 2% level about ten minutes before the close.

About $50,000 loaned at that rate, after which the market hardened to 5%.—[The New York *Tribune,* November 4, 1919.]

(a) What was the condition of business and of the stock market in November 1919? Had the low discount rates of the federal reserve banks promoted this condition? Why had the discount rate been kept below the market so long after the war? (b) The U. S. Treasury was enabled to float the war loans at favorable rates largely because of the support the Federal Reserve System gave the market by keeping the discount rate low. Some objectors argue that the economy to the government in interest rates was largely illusory, because the program promoted the inflation of the price level, made the cost of the war higher, and made the economic suffering in the depression of 1921-22 terrible. Discuss this question. (c) Should the Treasury policy be allowed to dominate the Federal Reserve System in time of war? in time of peace? (d) What was the course of commodity prices and of stock prices after these rates were raised in November? Did the Board follow these initial increases with others? Which raise is the more effective, the earliest or the later? Why?

852. Relation of the Federal Reserve Discount Rate to Market Rates

In regard to rediscount rates, while it is true that it is in the power of the Federal Reserve authorities to advance the rates in order to check speculation, the prevalent idea that any advance in rediscount rates would mean that the brakes were being put on this class of credit is mere confusion of thought. The rediscount rate should keep step with open market rates even if the reasons for advances in the latter are purely seasonal. No harm is done by aligning the rediscount and open market rates. On the other hand, a great deal of harm might be done by permitting too big a gap to stand between the two. Such action would not represent a negative position on the part of the Federal Reserve authorities. It would represent a flat invitation to speculators to go ahead. If bankers can rediscount at 4 per cent and loan the proceeds to speculators at 5 or 6 per cent a good many of them will do so.

Except as a possible sentimental influence, an advance to 4½ per cent in rediscount rates at all reserve centers would not have any bearing on security values or prospects. If, as is quite apparently the case, the hardening of interest rates is merely seasonal, it will, in the nature of things, be temporary. And, as pointed out heretofore, the very fact that commercial funds are in demand is our best assurance that general business is making satisfactory progress, which means, in turn, that profits are being made.—[Thomas Gibson, 1926.]

(a) What has been the course of the federal reserve discount rate, has it followed the market? (b) Has the Federal Reserve Board at times put the brake on speculation by advancing the rate? (c) Should the Board be clothed with the responsibility of stabilizing the stock market?

CHAPTER XXVIII

MATERIALS FOR STUDY

I. McFADDEN-PEPPER ACT, FEBRUARY 25, 1927

[PUBLIC—No. 639—69TH CONGRESS]

[H. R. 2]

An Act To further amend the national banking laws and the Federal Reserve Act, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Act entitled "An Act to provide for the consolidation of national banking associations," approved November 7, 1918, be amended by adding at the end thereof a new section to read as follows:

"SEC. 3. That any bank incorporated under the laws of any State, or any bank incorporated in the District of Columbia, may be consolidated with a national banking association located in the same county, city, town, or village under the charter of such national banking association on such terms and conditions as may be lawfully agreed upon by a majority of the board of directors of each association or bank proposing to consolidate, and which agreement shall be ratified and confirmed by the affirmative vote of the shareholders of each such association or bank owning at least two-thirds of its capital stock outstanding, or by a greater proportion of such capital stock in the case of such State bank if the laws of the State where the same is organized so require, at a meeting to be held on the call of the directors after publishing notice of the time, place, and object of the meeting for four consecutive weeks in some newspaper of general circulation published in the place where the said association or bank is situated, and in the legal newspaper for the publication of legal notices or advertisements, if any such paper has been designated by the rules of a court in the county where such association or bank is situated, and if no newspaper is published in the place, then in a paper of general circulation published nearest thereto, unless such notice of meeting is waived in writing by all stockholders of any such association or bank, and after sending such notice to each shareholder of record by registered mail at least ten days prior to said meeting, but any additional notice shall be given to the shareholders of such State bank which may be required by the laws of the State where the same is organized. The capital stock of such consolidated association shall not be less than that required under existing law for the organization of a national banking association in the place in which such consolidated association is located; and all the rights, franchises, and interests of such State or District bank so consolidated with a national banking association in and to every species of property, real, personal, and mixed, and choses in action thereto belonging, shall be deemed to be transferred to and vested in such national banking associa-

tion into which it is consolidated without any deed or other transfer, and the said consolidated national banking association shall hold and enjoy the same and all rights of property, franchises, and interests including the right of succession as trustee, executor, or in any other fiduciary capacity in the same manner and to the same extent as was held and enjoyed by such State or District bank so consolidated with such national banking association. When such consolidation shall have been effected and approved by the comptroller any shareholder of either the association or of the State or District bank so consolidated, who has not voted for such consolidation, may give notice to the directors of the consolidated association within twenty days from the date of the certificate of approval of the comptroller that he dissents from the plan of consolidation as adopted and approved, whereupon he shall be entitled to receive the value of the shares so held by him, to be ascertained by an appraisal made by a committee of three persons, one to be selected by the shareholder, one by the directors of the consolidated association, and the third by the two so chosen; and in case the value so fixed shall not be satisfactory to such shareholder he may within five days after being notified of the appraisal appeal to the Comptroller of the Currency, who shall cause a reappraisal to be made, which shall be final and binding; and the consolidated association shall pay the expenses of reappraisal, and the value as ascertained by such appraisal or reappraisal shall be deemed to be a debt due and shall be forthwith paid to said shareholder by said consolidated association, and the shares so paid for shall be surrendered and, after due notice, sold at public auction within thirty days after the final appraisement provided for in this Act; and if the shares so sold at public auction shall be sold at a price greater than the final appraised value, the excess in such sale price shall be paid to the said shareholder; and the consolidated association shall have the right to purchase such shares at public auction, if it is the highest bidder therefor, for the purpose of reselling such shares within thirty days thereafter to such person or persons and at such price as its board of directors by resolution may determine. The liquidation of such shares of stock in any State bank shall be determined in the manner prescribed by the law of the State in such cases if such provision is made in the State law; otherwise as hereinbefore provided. No such consolidation shall be in contravention of the law of the State under which such bank is incorporated.

"The words 'State bank,' 'State banks,' 'bank,' or 'banks,' as used in this section, shall be held to include trust companies, savings banks, or other such corporations or institutions carrying on the banking business under the authority of State laws."

Sec. 2. (a) That section 5136 of the Revised Statutes of the United States, subsection "second" thereof as amended, be amended to read as follows:

"Second. To have succession from the date of the approval of this Act, or from the date of its organization if organized after such date of approval until such time as it be dissolved by the act of its shareholders owning two-thirds of its stock, or until its franchise becomes forfeited by reason of violation of law, or until terminated by either a general or a special Act of Congress or until its affairs be placed in the hands of a receiver and finally wound up by him."

(b) That section 5136 of the Revised Statutes of the United States,

subsection "seventh" thereof, be further amended by adding at the end of the first paragraph thereof the following:

"*Provided,* That the business of buying and selling investment securities shall hereafter be limited to buying and selling without recourse marketable obligations evidencing indebtedness of any person, copartnership, association, or corporation, in the form of bonds, notes and/or debentures, commonly known as investment securities, under such further definition of the term 'investment securities' as may by regulation be prescribed by the Comptroller of the Currency, and the total amount of such investment securities of any one obligor or maker held by such association shall at no time exceed 25 per centum of the amount of the capital stock of such association actually paid in and unimpaired and 25 per centum of its unimpaired surplus fund, but this limitation as to total amount shall not apply to obligations of the United States, or general obligations of any State or of any political subdivision thereof, or obligations issued under authority of the Federal Farm Loan Act: *And provided further,* That in carrying on the business commonly known as the safe-deposit business no such association shall invest in the capital stock of a corporation organized under the law of any State to conduct a safe-deposit business in an amount in excess of 15 per centum of the capital stock of such association actually paid in and unimpaired and 15 per centum of its unimpaired surplus," so that the subsection as amended shall read as follows:

"Seventh. To exercise by its board of directors, or duly authorized officers or agents, subject to law, all such incidental powers as shall be necessary to carry on the business of banking; by discounting and negotiating promissory notes, drafts, bills of exchange, and other evidences of debt; by receiving deposits; by buying and selling exchange, coin, and bullion; by loaning money on personal security; and by obtaining, issuing, and circulating notes according to the provisions of this title: *Provided.* That the business of buying and selling investment securities shall hereafter be limited to buying and selling without recourse marketable obligations evidencing indebtedness of any person, copartnership, association, or corporation, in the form of bonds, notes and/or debentures, commonly known as investment securities, under such further definition of the term 'investment securities' as may by regulation be prescribed by the Comptroller of the Currency, and the total amount of such investment securities of any one obligor or maker held by such association shall at no time exceed 25 per centum of the amount of the capital stock of such association actually paid in and unimpaired and 25 per centum of its unimpaired surplus fund, but this limitation as to total amount shall not apply to obligations of the United States, or general obligations of any State or of any political subdivision thereof, or obligations issued under authority of the Federal Farm Loan Act: *And Provided further,* That in carrying on the business commonly known as the safe deposit business no such association shall invest in the capital stock of a corporation organized under the law of any State to conduct a safe deposit business in an amount in excess of 15 per centum of the capital stock of such association actually paid in and unimpaired and 15 per centum of its unimpaired surplus.

"But no association shall transact any business except such as is incidental and necessarily preliminary to its organization, until it has been authorized by the Comptroller of the Currency to commence the business of banking."

SEC. 3. That section 5137 of the Revised Statutes of the United States, subsection "First" thereof, be amended to read as follows:

"First. Such as shall be necessary for its accommodation in the transaction of its business."

SEC. 4. That section 5138 of the Revised Statutes of the United States, as amended, be amended to read as follows:

"SEC. 5138. No national banking association shall be organized with a less capital than $100,000, except that such associations with a capital of not less than $50,000 may, with the approval of the Secretary of the Treasury, be organized in any place the population of which does not exceed six thousand inhabitants, and except that such associations with a capital of not less than $25,000 may, with the sanction of the Secretary of the Treasury, be organized in any place the population of which does not exceed three thousand inhabitants. No such association shall be organized in a city the population of which exceeds fifty thousand persons with a capital of less than $200,000, except that in the outlying districts of such a city where the State laws permit the organization of State banks with a capital of $100,000 or less, national banking associations now organized or hereafter organized may, with the approval of the Comptroller of the Currency, have a capital of not less than $100,000."

SEC. 5. That section 5142 of the Revised Statutes of the United States, as amended, be amended to read as follows:

"SEC. 5142. Any national banking association may, with the approval of the Comptroller of the Currency, and by a vote of shareholders owning two-thirds of the stock of such associations, increase its capital stock to any sum approved by the said comptroller, but no increase in capital shall be valid until the whole amount of such increase is paid in and notice thereof, duly acknowledged before a notary public by the president, vice president, or cashier of said association, has been transmitted to the Comptroller of the Currency and his certificate obtained specifying the amount of such increase in capital stock and his approval thereof, and that it has been duly paid in as part of the capital of such association: *Provided, however,* That a national banking association may, with the approval of the Comptroller of the Currency, and by the vote of shareholders owning two-thirds of the stock of such association, increase its capital stock by the declaration of a stock dividend, provided that the surplus of said association, after the approval of the increase, shall be at least equal to 20 per centum of the capital stock as increased. Such increase shall not be effective until a certificate certifying to such declaration of dividend, signed by the president, vice president, or cashier of said association and duly acknowledged before a notary public, shall have been forwarded to the Comptroller of the Currency and his certificate obtained specifying the amount of such increase of capital stock by stock dividend, and his approval thereof."

SEC. 6. That section 5150 of the Revised Statutes of the United States be amended to read as follows:

"SEC. 5150. The president of the bank shall be a member of the board and shall be the chairman thereof, but the board may designate a director in lieu of the president to be chairman of the board, who shall perform such duties as may be designated by the board."

SEC. 7. That section 5155 of the Revised Statutes of the United States be amended to read as follows:

"SEC. 5155. The conditions upon which a national banking association

may retain or establish and operate a branch or branches are the following:

"(a) A national banking association may retain and operate such branch or branches as it may have in lawful operation at the date of the approval of this Act, and any national banking association which has continuously maintained and operated not more than one branch for a period of more than twenty-five years immediately preceding the approval of this Act may continue to maintain and operate such branch.

"(b) If a State bank is hereafter converted into or consolidated with a national banking association, or if two or more national banking associations are consolidated, such converted or consolidated association may, with respect to any of such banks, retain and operate any of their branches which may have been in lawful operation by any bank at the date of the approval of the Act.

"(c) A national banking association may, after the date of the approval of this Act, establish and operate new branches within the limits of the city, town or village in which said association is situated if such establishment and operation are at the time permitted to State banks by the law of the State in question.

"(d) No branch shall be established after the date of the approval of this Act within the limits of any city, town, or village of which the population by the last decennial census was less than twenty-five thousand. No more than one such branch may be thus established where the population, so determined, of such municipal unit does not exceed fifty thousand; and not more than two such branches where the population does not exceed one hundred thousand. In any such municipal unit where the population exceeds one hundred thousand the determination of the number of branches shall be within the discretion of the Comptroller of the Currency.

"(e) No branch of any national banking association shall be established or moved from one location to another without first obtaining the consent and approval of the Comptroller of the Currency.

"(f) The term 'branch' as used in this section shall be held to include any branch bank, branch office, branch agency, additional office, or any branch place of business located in any State or Territory of the United States or in the District of Columbia at which deposits are received, or checks paid, or money lent.

"(g) This section shall not be construed to amend or repeal section 25 of the Federal Reserve Act, as amended, authorizing the establishment by national banking associations of branches in foreign countries, or dependencies, or insular possessions of the United States.

"(h) The words 'State bank,' 'State banks,' 'bank,' or 'banks,' as used in this section, shall be held to include trust companies, savings banks, or other such corporations or institutions carrying on the banking business under the authority of State laws."

SEC. 8. That section 5190 of the Revised Statutes of the United States be amended to read as follows:

"SEC. 5190. The general business of each national banking association shall be transacted in the place specified in its organization certificate and in the branch or branches, if any, established or maintained by it in accordance with the provisions of section 5155 of the Revised Statutes, as amended by this Act."

SEC. 9. That the first paragraph of section 9 of the Federal Reserve Act, as amended, be amended so as to read as follows:

"SEC. 9. Any bank incorporated by special law of any State, or or-

ganized under the general laws of any State or of the United States, desiring to become a member of the Federal reserve system, may make application to the Federal Reserve Board, under such rules and regulations as it may prescribe, for the right to subscribe to the stock of the Federal reserve bank organized within the district in which the applying bank is located. Such application shall be for the same amount of stock that the applying bank would be required to subscribe to as a national bank. The Federal Reserve Board, subject to the provisions of this Act and to such conditions as it may prescribe pursuant thereto may permit the applying bank to become a stockholder of such Federal reserve bank.

"Any such State bank which, at the date of the approval of this Act, has established and is operating a branch or branches in conformity with the State law, may retain and operate the same while remaining or upon becoming a stockholder of such Federal reserve bank; but no such State bank may retain or acquire stock in a Federal reserve bank except upon relinquishment of any branch or branches established after the date of the approval of this Act beyond the limits of the city, town, or village in which the parent bank is situated."

SEC. 10. That section 5200 of the Revised Statutes of the United States, as amended, be amended to read as follows:

"SEC. 5200. The total obligations to any national banking association of any person, copartnership, association, or corporation shall at no time exceed 10 per centum of the amount of the capital stock of such association actually paid in and unimpaired and 10 per centum of its unimpaired surplus fund. The term 'obligations' shall mean the direct liability of the maker or acceptor of paper discounted with or sold to such association and the liability of the indorser, drawer, or guarantor who obtains a loan from or discounts paper with or sells paper under his guaranty to such association and shall include in the case of obligations of a copartnership or association the obligations of the several members thereof. Such limitation of 10 per centum shall be subject to the following exceptions:

"(1) Obligations in the form of drafts or bills of exchange drawn in good faith against actually existing values shall not be subject under this section to any limitation based upon such capital and surplus.

"(2) Obligations arising out of the discount of commercial or business paper actually owned by the person, copartnership, association, or corporation negotiating the same shall not be subject under this section to any limitation based upon such capital and surplus.

"(3) Obligations drawn in good faith against actually existing values and secured by goods or commodities in process of shipment shall not be subject under this section to any limitation based upon such capital and surplus.

"(4) Obligations as indorser or guarantor of notes, other than commercial or business paper excepted under (2) hereof, having a maturity of not more than six months, and owned by the person, corporation, association, or copartnership indorsing and negotiating the same, shall be subject under this section to a limitation of 15 per centum of such capital and surplus in addition to such 10 per centum of such capital and surplus.

"(5) Obligations in the form of banker's acceptances of other banks of the kind described in section 13 of the Federal Reserve Act shall not be subject under this section to any limitation based upon such capital and surplus.

"(6) Obligations of any person, copartnership, association or corpora-

tion, in the form of notes or drafts secured by shipping documents, warehouse receipts or other such documents transferring or securing title covering readily marketable nonperishable staples when such property is fully covered by insurance, if it is customary to insure such staples, shall be subject under this section to a limitation of 15 per centum of such capital and surplus in addition to such 10 per centum of such capital and surplus when the market value of such staples securing such obligation is not at any time less than 115 per centum of the face amount of such obligation, and to an additional increase of limitation of 5 per centum of such capital and surplus in addition to such 25 per centum of such capital and surplus when the market value of such staples securing such additional obligation is not at any time less than 120 per centum of the face amount of such additional obligation, and to a further additional increase of limitation of 5 per centum of such capital and surplus in addition to such 30 per centum of such capital and surplus when the market value of such staples securing such additional obligation is not at any time less than 125 per centum of the face amount of such additional obligation, and to a further additional increase of limitation of 5 per centum of such capital and surplus in addition to such 35 per centum of such capital and surplus when the market value of such staples securing such additional obligation is not at any time less than 130 per centum of the face amount of such additional obligation, and to a further additional increase of limitation of 5 per centum of such capital and surplus in addition to such 40 per centum of such capital and surplus when the market value of such staples securing such additional obligation is not at any time less than 135 per centum of the face amount of such additional obligation, and to a further additional increase of limitation of 5 per centum of such capital and surplus in addition to such 45 per centum of such capital and surplus when the market value of such staples securing such additional obligation is not at any time less than 140 per centum of the face amount of such additional obligation, but this exception shall not apply to obligations of any one person, copartnership, association or corporation arising from the same transactions and/or secured upon the identical staples for more than ten months.

"(7) Obligations of any person, copartnership, association, or corporation in the form of notes or drafts secured by shipping documents or instruments transferring or securing title covering livestock or giving a lien on livestock when the market value of the livestock securing the obligation is not at any time less than 115 per centum of the face amount of the notes covered by such documents shall be subject under this section to a limitation of 15 per centum of such capital and surplus in addition to such 10 per centum of such capital and surplus.

"(8) Obligations of any person, copartnership, association, or corporation in the form of notes secured by not less than a like amount of bonds or notes of the United States issued since April 24, 1917, or certificates of indebtedness of the United States, shall (except to the extent permitted by rules and regulations prescribed by the Comptroller of the Currency, with the approval of the Secretary of the Treasury) be subject under this section to a limitation of 15 per centum of such capital and surplus in addition to such 10 per centum of such capital and surplus."

SEC. 11. That section 5202 of the Revised Statutes of the United States as amended be amended by adding at the end thereof a new paragraph to read as follows:

"Eighth. Liabilities incurred under the provisions of section 202 of

Title II of the Federal Farm Loan Act, approved July 17, 1916, as amended by the Agricultural Credits Act of 1923."

SEC. 12. That section 5208 of the Revised Statutes of the United States as amended be amended by striking out the words "or who shall certify a check before the amount thereof shall have been regularly entered to the credit of the drawer upon the books of the bank," and in lieu thereof inserting the following: "or who shall certify a check before the amount thereof shall have been regularly deposited in the bank by the drawer thereof," so that the section as amended shall read as follows:

"SEC. 5208. It shall be unlawful for any officer, director, agent, or employee of any Federal reserve bank, or any member bank as defined in the Act of December 23, 1913, known as the Federal Reserve Act, to certify any check drawn upon such Federal reserve bank or member bank unless the person, firm, or corporation drawing the check has on deposit with such Federal reserve bank or member bank, at the time such check is certified, an amount of money not less than the amount specified in such check. Any check so certified by a duly authorized officer, director, agent, or employee shall be a good and valid obligation against such Federal reserve bank or member bank; but the act of any officer, director, agent, or employee of any such Federal reserve bank or member bank in violation of this section shall, in the discretion of the Federal Reserve Board, subject such Federal reserve bank to the penalties imposed by section 11, subsection (h) of the Federal Reserve Act, and shall subject such member bank, if a national bank, to the liabilities and proceedings on the part of the Comptroller of the Currency provided for in section 5234, Revised Statutes, and shall, in the discretion of the Federal Reserve Board, subject any other member bank to the penalties imposed by section 9 of said Federal Reserve Act for the violation of any of the provisions of said Act. Any officer, director, agent, or employee of any Federal reserve bank or member bank who shall willfully violate the provisions of this section, or who shall resort to any device, or receive any fictitious obligation, directly or collaterally, in order to evade the provisions thereof, or who shall certify a check before the amount thereof shall have been regularly deposited in the bank by the drawer thereof, shall be deemed guilty of a misdemeanor and shall, on conviction thereof in any district court of the United States, be fined not more than $5,000, or shall be imprisoned for not more than five years, or both, in the discretion of the court."

SEC. 13. That section 5211 of the Revised Statutes of the United States as amended be amended to read as follows:

"SEC. 5211. Every association shall make to the Comptroller of the Currency not less than three reports during each year, according to the form which may be prescribed by him, verified by the oath or affirmation of the president, or of the cashier, or of a vice president, or of an assistant cashier of the association designated by its board of directors to verify such reports in the absence of the president and cashier, taken before a notary public properly authorized and commissioned by the State in which such notary resides and the association is located, or any other officer having an official seal, authorized in such State to administer oaths, and attested by the signature of at least three of the directors. Each such report shall exhibit, in detail and under appropriate heads, the resources and liabilities of the association at the close of business on any past day by him specified, and shall be transmitted to the Comptroller within five days after the receipt of a request or requisition therefor from him; and

the statement of resources and liabilities, together with acknowledgment and attestation in the same form in which it is made to the comptroller, shall be published in a newspaper published in the place where such association is established, or if there is no newspaper in the place, then in the one published nearest thereto in the same county, at the expense of the association; and such proof of publication shall be furnished as may be required by the comptroller. The comptroller shall also have power to call for special reports from any particular association whenever in his judgment the same are necessary in order to obtain a full and complete knowledge of its condition."

SEC. 15. That section 22 of the Federal Reserve Act, subsection (a), paragraph 2 thereof, be amended to read as follows:

"(a) No member bank and no officer, director, or employee thereof shall hereafter make any loan or grant any gratuity to any bank examiner. Any bank officer, director, or employee violating this provision shall be deemed guilty of a misdemeanor and shall be imprisoned not exceeding one year, or fined not more than $5,000, or both, and may be fined a further sum equal to the money so loaned or gratuity given.

"Any examiner or assistant examiner who shall accept a loan or gratuity from any bank examined by him, or from an officer, director, or employee thereof, or who shall steal, or unlawfully take, or unlawfully conceal any money, note, draft, bond, or security or any other property of value in the possession of any member bank or from any safe deposit box in or adjacent to the premises of such bank, shall be deemed guilty of a misdemeanor and shall, upon conviction thereof in any district court of the United States, be imprisoned for not exceeding one year, or fined not more than $5,000, or both, and may be fined a further sum equal to the money so loaned, gratuity given, or property stolen, and shall forever thereafter be disqualified from holding office as a national bank examiner."

SEC. 16. That section 24 of the Federal Reserve Act be amended to read as follows:

"SEC. 24. Any national banking association may make loans secured by first lien upon improved real estate, including improved farm land, situated within its Federal reserve district or within a radius of one hundred miles of the place in which such bank is located, irrespective of district lines. A loan secured by real estate within the meaning of this section shall be in the form of an obligation or obligations secured by mortgage, trust deed, or other such instrument upon real estate when the entire amount of such obligation or obligations is made or is sold to such association. The amount of any such loan shall not exceed 50 per centum of the actual value of the real estate offered for security, but no such loan upon such security shall be made for a longer term than five years. Any such bank may make such loans in an aggregate sum including in such aggregate any such loans on which it is liable as indorser or guarantor or otherwise equal to 25 per centum of the amount of the capital stock of such association actually paid in and unimpaired and 25 per centum of its unimpaired surplus fund, or to one-half of its savings deposits, at the election of the association, subject to the general limitation contained in section 5200 of the Revised Statutes of the United States. Such banks may continue hereafter as heretofore to receive time and savings deposits and to pay interest on the same, but the rate of interest which such banks may pay upon such time deposits or upon savings or other deposits shall not exceed the maximum rate authorized by law to be paid upon such deposits by State banks or trust companies

organized under the laws of the State wherein such national banking association is located."

SEC. 16. That section 5139 of the Revised Statutes of the United States be amended by inserting in the first sentence thereof the following words: "or into shares of such less amount as may be provided in the articles of association" so that the section as amended shall read as follows:

"SEC. 5139. The capital stock of each association shall be divided into shares of $100 each, or into shares of such less amount as may be provided in the articles of association, and be deemed personal property, and transferable on the books of the association in such manner as may be prescribed in the by-laws or articles of association. Every person becoming a shareholder by such transfer shall, in proportion to his shares, succeed to all rights and liabilities of the prior holder of such shares; and no change shall be made in the articles of association by which the rights, remedies, or security of the existing creditors of the association shall be impaired."

SEC. 17. That section 5146 of the Revised Statutes of the United States as amended be amended by inserting in lieu of the second sentence thereof the following: "Every director must own in his own right shares of the capital stock of the association of which he is a director the aggregate par value of which shall not be less than $1,000, unless the capital of the bank shall not exceed $25,000 in which case he must own in his own right shares of such capital stock the aggregate value of which shall not be less than $500," so that the section as amended shall read as follows:

"SEC. 5146. Every director must during his whole term of service, be a citizen of the United States, and at least three-fourths of the directors must have resided in the State, Territory, or District in which the association is located, or within fifty miles of the location of the office of the association, for at least one year immediately preceding their election, and must be residents of such State or within a fifty-mile territory of the location of the association during their continuance in office. Every director must own in his own right shares of the capital stock of the association of which he is a director the aggregate par value of which shall not be less than $1,000, unless the capital of the bank shall not exceed $25,000 in which case he must own in his own right shares of such capital stock the aggregate par value of which shall not be less than $500. Any director who ceases to be the owner of the required number of shares of the stock, or who becomes in any other manner disqualified, shall thereby vacate his place."

SEC. 18. That the second subdivision of the fourth paragraph of section 4 of the Federal Reserve Act be amended to read as follows:

"Second. To have succession after the approval of this Act until dissolved by Act of Congress or until forfeiture of franchise for violation of law."

SEC. 19. That section 3 of the Federal Reserve Act, as amended, is further amended by adding at the end thereof the following:

"The Federal Reserve Board may at any time require any Federal Reserve Bank to discontinue any branch of such Federal Reserve Bank established under this section. The Federal Reserve Bank shall thereupon proceed to wind up the business of such branch bank, subject to such rules and regulations as the Federal Reserve Board may prescribe."

Approved, February 25, 1927.

II. INTEREST RATES

(a) Reserve Rediscount Rate on 60-90 Day Commercial Paper

Unit: Per Cent

OF TWELVE FEDERAL RESERVE BANKS

Composite of weekly averages

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
1926	4.00	4.00	4.00	3.98	3.96	3.96	3.96	3.99	4.00	4.00	4.00	4.00	3.99
1925	3.75	3.76	3.79	3.79	3.79	3.79	3.79	3.79	3.79	3.79	3.88	3.96	3.81
1924	4.50	4.50	4.50	4.50	4.46	4.17	3.93	3.79	3.79	3.77	3.75	3.75	4.11
1923	4.38	4.40	4.49	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.48
1922	4.88	4.80	4.75	4.67	4.63	4.59	4.48	4.41	4.38	4.38	4.38	4.38	4.56
1921	6.42	6.46	6.50	6.44	6.21	6.21	6.00	5.84	5.79	5.67	5.04	4.99	5.96
1920	5.06	6.00	6.00	6.00	6.00	6.33	6.33	6.33	6.33	6.33	6.42	6.42	6.13
1919	4.84	4.83	4.83	4.83	4.83	4.83	4.83	4.83	4.83	4.83	4.83	4.83	4.83
1918	4.62	4.63	4.63	4.75	4.78	4.84	4.86	4.85	4.85	4.85	4.85	4.85	4.78
1917	4.25	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.56	4.31
1916	4.17	4.17	4.17	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.21	4.20
1915	....	....	....	....	4.50	4.50	4.50	4.43	4.37	4.24	4.19	4.17	4.36

OF THE NEW YORK FEDERAL RESERVE BANK

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1926	4	4	4	3½	3½	3½	3½	4	4	4	4	4
1925	3	3½	3½	3½	3½	3½	3½	3½	3½	3½	3½	3½
1924	4½	4¼	4½	4½	4	3½	3½	3	3	3	3	3
1923	4	4½	4½	4½	4½	4½	4½	4½	4½	4½	4½	4½
1922	4½	4½	4½	4½	4½	4	4	4	4	4	4	4
1921	7	7	7	7	6½	6½	6	5½	5	5	4½	4½
1920	4¾	6	6	6	6	7	7	7	7	7	7	7
1919	4¾	4¾	4¾	4¾	4¾	4¾	4¾	4¾	4¾	4¾	4¾	4¾
1918	4½	4½	4½	4¾	4¾	4¾	4¾	4¾	4¾	4¾	4¾	4¾
1917	4	4	4	4	4	4	4	4	4	4	4	4½
1916	4	4	4	4	4	4	4	4	4	4	4	4
1915	5	4	4	4	4	4	4	4	4	4	4	4

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(b) Monthly Interest Rates

Average of high and low weekly rates
On 60-90 Day Commercial Paper
Choice, double-name

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
1926	4.31	4.19	4.28	4.19	4.00	3.88	3.97	4.25	4.43	4.50	4.44	4.38	4.24
1925	3.63	3.65	3.94	3.95	3.88	3.88	3.93	4.00	4.25	4.44	4.38	4.38	4.03
1924	4.88	4.78	4.59	4.63	4.23	3.91	3.53	3.23	3.13	3.13	3.28	3.56	3.91
1923	4.63	4.69	5.00	5.13	5.13	4.88	4.94	5.03	5.16	5.13	5.09	4.98	4.98
1922	4.88	4.88	4.78	4.60	4.25	4.05	3.94	3.91	4.25	4.38	4.63	4.63	4.43
1921	7.83	7.75	7.63	7.55	6.88	6.63	6.28	6.00	5.90	5.65	5.13	5.13	6.53
1920	6.00	6.41	6.68	6.81	7.16	7.72	7.84	8.00	8.00	8.00	7.94	7.88	7.37
1919	5.19	5.19	5.38	5.38	5.38	5.53	5.42	5.38	5.38	5.38	5.50	5.88	5.42
1918	5.58	5.69	5.88	5.90	5.88	5.88	5.88	5.94	6.00	6.00	5.97	5.86	5.87
1917	3.55	4.09	4.13	4.28	4.83	5.00	4.68	4.81	5.19	5 38	5.47	5 50	4.74
1916	3.13	3.13	3.13	3.13	3.13	3.63	3.97	3.73	3.38	3.38	3.50	3.91	3.43
1915	3.84	3.75	3.38	3.66	3.72	3.65	3.25	3.53	3.25	3.22	2.98	3.13	3.45
1914	4.53	3.84	3.88	3.73	3.88	3.84	4.40	6.34	6.70	6.44	5.50	4.35	4.73
1913	4.93	4.91	5.75	5.53	5.36	5.88	6.06	6.00	5.78	5.69	5.56	5.68	5.60
1912	3.90	3.75	4.19	4.15	4.19	4.00	4.53	5.00	5.56	5.93	5.72	6.00	4.78
1911	3.98	4.09	3.88	3.66	3.63	3.69	3.78	4.19	4.54	4.35	3.91	4.63	4.00
1910	4.75	4.44	4.50	.75	4.75	4.81	5.38	5.43	5.53	5.56	5.50	4.66	5.04
1909	3.68	3.54	3.50	3.50	3.44	3.25	3.38	4.04	4.25	5.03	5.09	5.09	3.99
1908	6.59	5.06	5.63	4.38	3.94	3.69	3.75	3.61	3.89	4.10	4.04	3.85	4.38
1907	6.15	5.94	6.19	5.92	5.40	5.50	5.75	6.25	6.79	7.10	7.40	8.00	6.38
1906	5.06	5.04	5.28	5.44	5.33	5.25	5.48	6.00	6.56	6.30	6.25	6.25	5.68
1905	4.00	3.81	3.93	4.00	3.98	3.75	4.13	4.19	4.72	4.92	5.53	5.79	4.40
1904	4.89	4.79	4.68	4.13	3.93	3.60	3.55	3.84	4.29	4.41	4.14	4.28	4.21
1903	5.22	4.90	5.54	5.19	4.75	5.16	5.43	5.94	6.00	5.79	5.95	5.79	5.47
1902	4.56	4.00	4.37	4.53	4.54	4.42	4.64	4.82	5.58	5.90	5.71	6.00	4.92
1901	4.08	3.70	3.75	3.97	3.95	3.94	4.25	4.50	4.94	4.64	4.72	4.90	4.28
1900	4.81	4.43	4.86	4.30	3.69	3.69	4.00	4.22	4.45	5.06	4.39	4.75	4.39
1899	2.88	2.95	3.79	3.71	3.59	3.31	3.66	4.35	4.83	5.10	5.36	5.88	4.12
1898	3.35	3.13	4.69	5.75	4.63	3.22	3.63	3.64	4.14	3.39	3.31	3.05	3.83
1897	3.36	3.00	3.33	3.55	3.54	3.16	3.43	3.75	4.11	4.19	3.45	3.47	3.53
1896	6.00	5.70	5.18	5.31	4.53	4.25	5.13	7.75	8.44	8.56	5.25	3.75	5.82
1895	3.00	3.65	3.90	3.96	2.75	2.63	2.95	3.53	4.04	4.81	4.07	4.58	3.66
1894	3.50	3.25	3.00	3.15	2.91	2.89	3.00	3.09	3.28	2.72	2.81	2.88	3.04
1893	5.18	4.85	6.80	5.75	6.65	8.75	9.75	9.70	8.32	5.96	4.47	3.67	6.66
1892	4.17	3.69	3.96	3.45	3.18	2.94	3.43	4.00	4.75	5.11	5.11	5.50	4.11
1891	5.83	5.00	5.25	5.09	5.33	5.50	5.63	5.75	5.79	5.60	5.10	4.85	5.39
1890	5.39	5.04	5.50	5.14	5.06	5.00	5.08	5.61	5.71	5.89	8.20	7.38	5.75

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On 60-90 Day Time Loans

Mixed collateral, at the New York Stock Exchange

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
1926	4.77	4.63	4.70	4.19	4.03	4.13	4.38	4.67	4.93	4.95	4.64	4.69	4.56
1925	3.64	3.66	4.05	3.85	3.63	3.80	3.94	4.38	4.45	4.78	4.93	4.99	4.18
1924	4.75	4.72	4.67	4.31	3.94	3.26	2.75	2.52	2.81	2.68	3.21	3.34	3.58
1923	4.66	4.85	5.23	5.31	5.11	4.88	5.13	5.25	5.44	5.31	4.99	4.94	5.09
1922	4.75	4.85	4.74	4.41	4.19	4.13	4.30	4.22	4.44	4.71	4.96	4.93	4.55
1921	6.60	6.81	6.75	6.68	6.60	6.75	6.20	6.00	5.65	5.38	5.19	5.13	6.14
1920	7.25	8.13	8.19	8.10	8.25	8.06	8.28	8.72	8.41	7.89	7.85	7.30	8.04
1919	5.18	5.32	5.50	5.79	5.58	5.79	6.00	5.95	5.88	6.15	6.50	6.60	5.85
1918	5.61	5.72	6.00	6.00	6.00	5.78	5.69	5.90	6.00	6.00	6.00	5.72	5.87
1917	3.15	3.71	4.21	3.40	4.45	4.74	4.30	4.39	5.47	5.54	5.39	5.51	4.52
1916	2.69	2.69	2.76	2.82	2.81	3.32	3.88	3.07	3.16	3.24	3.12	4.24	3.15
1915	3.12	2.76	2.73	2.77	2.77	2.81	2.59	2.68	2.62	2.59	2.60	2.46	2.71
1914	3.65	2.88	2.93	2.72	2.52	2.38	2.79	7.63	7.00	6.50	5.20	3.88	4.17
1913	4.09	4.50	5.41	4.30	3.86	4.04	4.34	4.14	4.45	4.83	4.94	5.09	4.50
1912	2.88	2.70	3.25	3.49	3.13	3.12	3.40	3.84	5.44	5.65	5.94	5.95	4.07
1911	3.36	3.06	2.76	2.67	2.68	2.73	2.77	3.04	3.30	3.31	3.52	4.10	3.11
1910	4.30	3.60	3.80	3.99	3.93	3.33	3.62	3.37	4.21	4.59	4.76	3.91	3.95
1909	2.57	2.66	2.55	2.42	2.48	2.46	2.23	3.02	3.49	4.53	4.91	4.68	3.17
1908	5.83	4.21	3.49	2.79	2.69	2.21	2.13	2.30	2.41	2.84	3.21	3.10	3.11
1907	5.82	5.23	6.16	4.30	3.83	4.21	4.80	5.99	5.57	6.39	13.60	10.55	6.37
1906	5.32	4.93	5.32	5.74	4.90	4.37	4.30	5.18	7.16	5.97	7.23	8.22	5.72
1905	2.88	3.00	3.22	3.40	3.16	2.99	2.99	3.05	4.05	4.74	5.83	6.18	3.42
1904	4.00	3.58	3.08	2.60	2.63	2.19	2.21	2.16	2.93	3.32	3.69	3.68	3.01
1903	4.94	4.54	5.63	5.21	3.95	4.19	4.45	4.91	4.94	5.02	5.81	5.59	4.93
1902	4.58	4.00	4.00	4.21	5.08	4.29	4.53	4.65	5.94	6.00	5.97	6.00	4.94
1901	3.91	3.38	3.15	4.00	4.45	3.56	4.31	4.24	5.06	4.69	4.65	5.28	4.22
1900	5.00	4.06	4.55	3.50	3.00	3.05	3.06	3.35	3.69	4.97	4.44	4.78	3.95
1899	2.75	2.88	3.95	3.81	3.17	3.00	3.60	4.22	5.15	5.17	5.75	6.00	4.12
1898	2.81	2.69	4.47	5.40	3.63	2.63	2.50	2.69	3.63	2.63	2.75	2.98	3.23
1897	2.44	2.31	2.66	2.50	2.25	2.13	1.95	2.47	2.94	3.15	2.75	3.30	2.57
1896	6.00	5.30	3.75	3.88	3.00	2.94	3.44	5.80	6.00	7.10	4.53	2.95	4.56
1895	2.25	3.13	3.35	3.42	2.38	1.88	2.16	2.81	2.63	2.93	2.50	4.13	2.80
1894	2.35	2.47	2.25	2.31	1.81	1.75	1.75	2.13	2.20	1.94	2.25	2.38	2.13
1893	4.81	4.00	6.00	5.80	5.81	5.38	6.60	6.60	5.90	4.81	3.47	2.40	5.13
1892	3.38	2.91	3.44	2.85	2.32	2.44	2.80	2.75	4.38	5.20	5.31	5.33	3.76
1891	5.16	4.38	4.63	4.25	5.35	4.38	4.22	5.25	5.47	5.18	4.69	4.32	4.77
1890	4.69	4.63	5.05	4.88	5.40	4.56	4.75	5.60	6.00	6.00	6.00	6.00	5.30

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(c) Monthly Range of Interest Rates on Call Loans

At the New York Stock Exchange

	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917
January	4 –6	2 –4½	3¾–5¾	3½–5½	3 –6	6 –7	6–25	3¾–6	2½–6	1½–2¾
February	4 –5½	3 –5	4 –5½	4 –6	4 –6	6 –9	6–25	3¾–7	3 –6	1¾–3
March	4 –5½	3¼–5	2½–5½	4½–6	3 –5½	6 –7	6–15	3¾–6	2½–6	1½–2½
April	4 –5½	3½–4¾	3½–5½	4 –6	3½–5	5 –7	6–15	4 –6	2 –6	2 –4
May	3½–4½	3½–4½	2¾–4½	4 –6	3 –5	6½–7	6–12	3¼–6	2 –6	2 –4½
June	3½–5	3¾–5½	2 –3	4 –6	2¾–5½	5 –8	6–14	4¾–15	3 –6	2 –6
July	4 –5	3½–6	2 –3	4 –6	2¾–5	3½–6	7–15	5 –15	3½–6	1¾–10
August	4 –5	4 –4½	2 –2	4 –6	3 –5	4½–6	6–10	3 –18	4 –6	1½–6
September	4½–6	3½–6	2 –2	3½–6	3½–6	4½–6	6–10	4 –9	5 –6	2½–7
October	4 –5½	4 –5½	2 –3	4 –6	4 –6	4 –6	6–10	4 –19	6 –6	2 –6
November	4½–5½	4½–5½	2 –4	4 –5½	3½–6	4 –6	5–10	2 –30	4 –6	2½–6
December	4½–6	4½–6	2½–5½	4½–6	3¾–5½	4½–6	6–7	5 –25	3½–6	3 –6
Year	3½–6	2 –6	2 –5¾	3½–6	2¾–6	3½–9	5–25	2 –30	2 –6	1½–10

	1916	1915	1914	1913	1912	1911	1910	1909	1908
January	1½–3	1¼–3	1½–10	2 –6	1¾–4	1⅛–6	1¾–14	1½–3	1¼–20
February	1¾–2	1¾–2½	1⅜–3	2½–4½	1¾–2½	1½–2½	2 –3	1½–3	1½–2¼
March	1½–2¾	1½–2¼	1¾–2	2 –6	1½–2½	1 –2¼	2 –3¼	1½–2½	1¾–2¼
April	1¾–3	1¾–2½	1½–2	2¼–7	2 –5	2 –2½	1 –7	1 –2½	1 –2
May	1½–3	1 –2½	1½–2	2 –3	2¼–3	2 –2½	2 –6	1½–2½	1 –2
June	2½–4	1 –2	1½–2	1 –3	2 –3	2 –2½	1½–3½	1½–2¾	1 –1¾
July	2 –6	1¼–2	1¾–7	1½–2½	2 –3½	2 –2½	1 –3½	1½–2	1 –1¾
August	2 –2¾	1½–2	6 –8	1¾–2½	2 –3½	1¾–2½	1 –2	1½–2½	¾–1¼
September	2 –3	1¾–2	6 –8	2 –4½	3 –7	2 –2½	1¾–2¼	2¼–3	1 –2½
October	2 –4	1½–2	5½–8	2½–10	3 –7½	1¾–2½	2 –4	3 –6	1 –2
November	2 –4½	1½–2	4½–6	1 –10	3 –20	2 –3	2 –4¾	2½–6	1 –3
December	2 –15	1½–2½	2½–5	2 –8	1½–16	2⅜–6	2 –7	2½–7	1 –4½
Year	1½–15	1 –3	1⅜–10	1 –10	1½–20	1 –6	1 –14	1 –7	1 –20

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III. CONDITION OF ALL NATIONAL AND STATE MEMBER BANKS

(a) National Banks

Ratio Reserve to Deposits

Unit: Per Cent

Call	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916	1915
1st	9.21	9.44	9.42	9.67	9.91	9.70	9.91	10.20	10.27	25.18	26.05	24.84
2nd	9.68	9.65	9.38	9.39	10.04	9.69	9.90	10.08	10.74	24.05	24.60	24.66
3rd	....	9.50	9.72	9.54	9.76	9.46	9.80	10.46	11.17	22.19	23.86	25.28
4th	....	9.48	10.07	9.49	10.24	9.53	9.71	10.02	10.65	*10.40	23.86	26.14
5th	....	....	....	....	9.90	10.28	9.77	9.94	10.23	10.44	24.78	25.54
6th	....	....	....	....	....	....	9.83	10.25	10.23	10.55	24.57	24.66

Loans and Discounts

Unit: $1,000,000

1st	13,301	12,469	11,952	11,668	‡11,283	11,681	11,905	9,691	9,139	8,713	7,490	6,410
2nd	13,418	12,674	11,979	11,818	11,184	11,367	12,289	9,905	9,260	8,752	7,606	6,644
3rd	13,567	13,134	12,210	11,935	11,248	11,125	12,397	10,575	9,620	8,818	7,679	6,660
4th	.....	13,535	12,320	11,877	11,236	10,978	12,416	11,085	9,494	9,055	†7,860	6,757
5th	.....	.....	.....	.....	11,600	10,982	12,312	11,560	10,097	9,536	8,346	7,234
6th	.....	.....	.....	.....	.....	.....	12,095	11,786	9,918	9,391	8,341	7,358

**Deposits

Unit: $1,000,000

1st	17,891	15,964	14,584	14,025	12,500	12,786	13,372	11,802	11,237	9,274	7,716	6,339
2nd	17,237	16,463	14,976	14,236	12,767	12,476	13,649	11,363	11,498	9,696	8,136	6,662
3rd	17,429	16,597	15,445	14,297	13,368	12,655	13,881	12,458	11,220	9,754	8,143	6,661
4th	.....	17,392	16,098	14,699	13,585	12,143	13,649	13,191	11,000	10,186	8,446	6,762
5th	.....	.....	.....	.....	14,159	12,544	13,867	13,584	12,150	11,691	9,139	7,446
6th	.....	.....	.....	.....	.....	.....	13,319	13,914	12,148	11,252	9,003	7,641

* Member banks hold reserve only with Federal Reserve banks.

‡ Beginning March 10, 1922, rediscounts are included in Loans and Discounts.

† Beginning with report of Sept. 12, 1916, notes and bills rediscounted are not included in loans and discounts, as was previous custom.

** Totals of demand, time and U. S. Government deposits.

[Report of Comptroller of the Currency.]

(b) Member Banks

First Report of Each Month—in Units of $1,000,000,000

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
Total Loans and Discounts													
1926.....	14.18	13.98	14.01	13.96	14.00	13.96	14.06	14.07	14.18	14.41	14.37	14.38	14.13
1925.....	13.11	13.11	13.24	13.21	13.19	13.18	13.38	13.31	13.48	13.82	14.03	14.01	13.42
1924.....	12.07	11.93	11.94	12.10	12.08	11.94	12.15	12.35	12.44	12.78	12.77	12.91	12.29
1923.....	11.62	11.44	11.64	11.88	11.99	11.81	11.95	11.74	11.77	11.98	11.92	11.93	11.81
1922.....	11.21	10.88	10.92	10.87	10.87	10.89	10.84	10.80	10.82	11.05	11.28	11.25	10.97
1921.....	13.30	12.91	12.76	12.55	12.25	12.00	11.82	11.67	11.48	11.62	11.40	11.31	12.09
Total Loans, Discounts and Investments													
1926.....	19.62	19.45	19.51	19.49	19.60	19.68	19.71	19.72	19.78	20.02	19.96	19.90	19.70
1925.....	18.66	18.57	18.58	18.70	18.67	18.68	18.89	18.79	18.92	19.26	19.49	19.40	18.88
1924.....	16.62	16.42	16.38	16.63	16.66	16.66	17.06	17.33	17.57	18.19	18.34	18.53	17.20
1923.....	16.35	16.24	16.34	16.57	16.57	16.47	16.63	16.35	16.28	16.51	16.42	16.39	16.43
1922.....	14.77	14.71	14.55	14.58	14.80	15.12	15.24	15.36	15.33	15.51	15.81	15.79	15.13
1921.....	16.60	16.22	16.05	15.90	15.58	15.30	15.19	15.05	14.73	15.03	14.85	14.76	15.44
Net Demand and Time Deposits													
1926.....	18.67	18.44	18.46	18.28	18.44	18.68	18.67	18.61	18.68	18.71	18.79	18.82	18.60
1925.....	18.13	17.94	17.87	17.81	17.89	17.95	18.23	18.01	18.05	18.22	18.57	18.45	18.09
1924.....	15.54	15.40	15.37	15.48	15.68	15.90	16.41	16.81	17.04	17.54	17.75	18.04	16.41
1923.....	15.28	15.21	15.24	15.20	15.28	15.17	15.27	15.05	14.97	15.06	15.16	15.15	15.17
1922.....	13.43	13.28	13.43	13.58	13.97	14.32	14.56	14.64	14.60	14.75	14.83	14.71	14.34
1921.....	13.85	13.58	13.44	13.20	13.16	13.21	12.95	12.81	12.90	12.88	13.17	13.20	13.19
Bills Payable and Rediscounts with F. R. Banks													
Unit: $1,000,000													
1926.....	411	314	404	373	344	305	389	326	412	424	484	446	386
1925.....	115	183	255	236	233	215	307	337	373	455	452	451	301
1924.....	553	255	262	304	208	160	133	62	108	92	77	103	191
1923.....	390	357	372	469	486	471	644	516	557	598	539	474	489
1922.....	647	400	318	267	180	117	206	117	137	182	341	450	280
1921.....	2,050	1,900	1,832	1,685	1,533	1,385	1,250	1,079	979	880	767	682	1,335

[Federal Reserve Bulletin.]

IV. COMMERCIAL FAILURES

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
NUMBER													
1926	2,296	1,801	1,984	1,957	1,730	1,708	1,605	1,593	1,437	1,763	1,830	2,069	21,773
1925	2,317	1,793	1,859	1,939	1,767	1,745	1,685	1,513	1,465	1,581	1,672	1,878	21,214
1924	2,108	1,730	1,817	1,707	1,816	1,607	1,615	1,520	1,306	1,696	1,653	2,040	20,615
1923	2,126	1,508	1,682	1,520	1,530	1,358	1,231	1,319	1,226	1,673	1,704	1,841	18,718
1922	2,723	2,331	2,463	2,167	1,960	1,740	1,753	1,714	1,566	1,708	1,737	1,814	23,676
1921	1,895	1,641	1,336	1,487	1,356	1,320	1,444	1,562	1,466	1,713	1,988	2,444	19,652
1920	569	492	566	504	547	674	681	673	677	923	1,050	1,525	8,881
1919	673	602	629	543	531	485	452	468	473	463	551	581	6,451
1918	1,178	980	1,142	905	880	804	786	720	674	660	570	683	9,982
1917	1,540	1,165	1,232	1,069	1,296	1,186	1,137	1,149	963	1,082	981	1,055	13,855
1916	2,009	1,688	1,690	1,399	1,482	1,227	1,207	1,394	1,154	1,240	1,251	1,252	16,993
1915	2,848	2,278	2,090	2,063	1,707	1,754	1,739	1,395	1,414	1,599	1,565	1,704	22,156
1914	1,857	1,505	1,464	1,336	1,221	1,160	1,411	1,272	1,615	1,686	1,815	1,938	18,280
1913	1,814	1,454	1,190	1,314	1,246	1,145	1,119	1,145	1,235	1,434	1,377	1,514	16,037
1912	1,897	1,539	1,392	1,279	1,204	1,006	1,230	1,102	1,167	1,150	1,175	1,311	15,452
1911	1,663	1,198	1,124	1,206	1,006	864	1,127	926	827	1,169	1,105	1,226	13,441
LIABILITIES													
Unit: $1,000,000													
1926	43.66	34.18	30.62	38.49	33.54	29.41	29.68	28.13	29.99	33.23	32.69	45.62	409.2
1925	54.35	40.12	34.00	37.19	37.03	36.70	34.51	37.16	30.69	29.54	35.92	36.53	443.7
1924	51.27	35.94	97.65	48.90	36.59	34.10	36.81	55.15	34.30	36.10	31.12	45.28	543.2
1923	49.21	40.63	48.39	51.49	41.02	28.68	35.72	34.34	28.70	79.30	50.29	51.62	539.4
1922	73.80	72.61	71.61	73.06	44.40	38.24	40.01	40.28	36.91	34.65	40.27	58.07	623.9
1921	52.14	60.85	67.41	38.57	57.07	34.64	42.77	42.90	37.02	53.06	53.47	87.50	627.4
1920	7.24	9.76	12.70	13.22	10.83	32.99	21.91	28.37	29.55	38.91	30.76	58.87	295.1
1919	10.74	11.49	13.60	11.45	11.96	9.48	5.51	5.93	8.79	6.87	9.18	8.30	113.3
1918	19.28	12.83	17.67	14.27	13.13	10.61	9.79	7.98	17.41	13.98	13.82	12.25	163.0
1917	18.28	16.62	17.41	12.59	11.77	18.06	17.24	18.09	11.90	13.81	13.64	14.04	182.4
1916	25.86	18.74	16.89	18.38	19.47	11.93	11.65	20.13	11.57	10.78	14.10	16.75	190.2
1915	49.64	32.40	23.66	43.52	21.05	18.31	18.93	17.73	16.21	25.52	15.69	19.61	302.2
1914	39.37	22.35	21.49	20.55	23.45	57.88	20.38	43.47	32.02	29.70	25.49	30.90	358.1
1913	22.97	28.14	25.72	18.45	16.86	20.77	20.33	20.85	22.66	20.25	24.20	31 48	272.7
1912	19.77	21.48	21.76	16.87	15.28	12.85	16.10	16.15	13.28	15.76	15.65	18.16	203.1
1911	24.09	17.09	18.47	16.92	13.47	13.65	12.15	11.12	11.90	19.27	15.27	17.66	191.1

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Number * of Failures and Per Cent of Total Firms in Business

Month	1916		1917		1918		1919		1920		1921	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
January	1,904	.110	1,549	.088	1,199	.067	622	.035	540	.030	1,947	.103
February	1,648	.095	1,146	.065	949	.053	547	.031	462	.027	1,538	.081
March	1,664	.095	1,190	.068	1,018	.057	551	.031	533	.029	1,418	.074
April	1,333	.077	1,083	.062	867	.049	500	.028	488	.028	1,449	.075
May	1,443	.083	1,243	.070	836	.047	480	.028	500	.029	1,341	.070
June	1,245	.071	1,114	.063	776	.043	452	.025	618	.034	1,354	.070
July	1,186	.068	1,094	.062	779	.043	433	.024	637	.036	1,468	.075
August	1,349	.078	1,075	.061	734	.041	456	.026	645	.037	1,602	.082
September	1,164	.068	918	.052	666	.037	448	.028	677	.038	1,542	.079
October	1,253	.072	1,044	.059	674	.037	469	.026	892	.050	1,761	.089
November	1,258	.072	972	.055	559	.032	490	.028	1,060	.059	1,979	.100
December	1,301	.074	1,018	.059	625	.034	535	.030	1,631	.087	2,436	.123
Tot. and Av	16,748	.080	13,446	.064	9,682	.045	5,983	.028	8,683	.040	19,835	.085

Month	1922		1923		1924		1925		1926		1927	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
January	2,723	.137	2,165	.106	2,170	.105	2,329	.110	2,190	.100	2,346	.104
February	2,202	.110	1,536	.076	1,651	.080	1,724	.081	1,735	.080		
March	2,380	.119	1,680	.082	1,737	.084	1,757	.082	1,936	.088		
April	2,061	.103	1,579	.077	1,717	.082	1,803	.084	1,850	.084		
May	1,868	.093	1,500	.073	1,778	.085	1,670	.078	1,683	.077		
June	1,700	.085	1,362	.066	1,589	.076	1,591	.074	1,643	.074		
July	1,664	.083	1,318	.064	1,582	.075	1,568	.073	1,631	.074		
August	1,695	.084	1,380	.067	1,476	.070	1,433	.066	1,553	.070		
September	1,513	.075	1,253	.061	1,292	.061	1,350	.062	1,344	.063		
October	1,655	.082	1,641	.080	1,637	.078	1,494	.069	1,592	.072		
November	1,749	.086	1,679	.081	1,562	.074	1,567	.072	1,722	.077		
December	1,838	.090	1,850	.090	1,976	.093	1,753	.081	2,028	.090		
Tot. and Av	23,048	.096	18,943	.077	20,167	.080	20,039	.078	20,907	.079		

* Average Dun and Bradstreet.

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V. BUSINESS INDEXES

(a) Index of Production in Basic Industries

	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
January	104	91	78	113	119	104	108	116	84	87	121	121	127	
February	102	94	83	117	114	107	100	115	84	91	120	121	124	
March	96	95	87	115	116	112	96	115	81	95	125	117	120	
April	102	94	92	111	120	115	99	108	79	85	124	114	119	
May	101	90	91	114	123	115	93	106	77	92	127	104	111	
June	97	96	96	115	119	110	92	107	77	94	122	94	110	
July	98	90	98	110	112	116	102	105	75	95	121	95	113	
August	94	86	97	113	112	114	104	102	79	94	120	94	109	
September	98	86	104	114	111	112	105	102	79	107	114	103	111	
October	99	82	105	117	116	106	101	99	83	107	118	109	116	
November	94	78	110	121	119	106	98	95	86	115	116	108	115	
December	93	78	118	117	112	108	103	90	83	116	110	117	121	

[Federal Reserve Bulletin.]

(b) Index of the Volume of Manufacturing

	1919	1920	1921	1922	1923	1924	1925	1926
January	100	112	74	84	121	123	127	
February	88	106	69	82	116	124	120	
March	95	118	80	98	134	128	134	
April	96	109	78	95	131	123	132	
May	96	110	81	109	138	113	129	
June	96	108	80	109	128	98	125	
July	101	101	75	103	118	97	126	
August	108	104	85	110	126	105	121	
September	105	101	83	106	117	113	126	
October	107	97	89	118	128	124	141	
November	104	85	86	120	118	113	129	
December	103	75	78	113	109	117	129	

[Federal Reserve Bulletin.]

(c) Index of the Volume of Trade

	1919	1920	1921	1922	1923	1924	1925	1926
January	96	110	90	94	109	107	111	
February	96	105	90	95	110	111	113	
March	93	109	90	101	113	105	110	
April	100	105	91	100	110	104	111	
May	105	105	92	102	110	102	109	
June	110	102	92	104	108	99	108	
July	111	102	92	100	104	99	110	
August	109	100	94	100	104	101	107	
September	108	96	94	104	103	105	111	
October	108	94	93	104	105	107	115	
November	108	93	91	104	108	107	111	
December	106	92	94	108	107	111	116	

[Federal Reserve Bank of New York.]

(d) The Annalist Index of Business Activity

	1919	1920	1921	1922	1923	1924	1925	1926
January	103.4	111.3	82.4	87.1	108.1	104.0	102.4	102.3
February	97.9	111.3	82.8	91.1	108.1	105.0	102.9	103.2
March	96.9	114.9	81.6	94.5	110.0	102.8	102.6	104.7
April	98.9	108.8	82.5	89.2	114.2	99.3	103.4	103.8
May	100.2	111.0	85.3	93.4	115.0	92.4	101.	101.6
June	103.0	113.6	85.1	98.7	111 8	86.9	98.5	103.2
July	110.9	111.6	83.6	97.4	110.8	86.8	101.1	102.8
August	108.3	110.5	85.2	96.1	107.5	89.8	100.7	105.0
September	108.6	106.2	86.5	98.1	105.8	95.7	100.8	107.1
October	104.2	100.0	88.8	101.4	103.7	97.7	102.1	105.0
November	106.3	94.2	86.7	106.5	103.0	97.4	104.0	103.7
December	108.4	90.0	86.3	108.8	100.8	101.5	105.8	103.0

[*The Annalist*, January 28, 1927, New York Times Co., New York, by permission.]

(e) American Telephone and Telegraph Company General Business Curve

(Expressed in terms of percentage deviations from normal)

	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889
January	− 9	− 8	−13	+ 7	+12	+11	+ 9	−10	−16*	−10	− 2	− 2	+ 6
February	− 9	− 9	−13	+ 9	+12	+11	+ 7	− 9	−19	− 8	+ 3	− 2	+ 5
March	−10	−10	−13	+11	+12	+12	+ 4	− 8	−17	− 6	+ 9	− 7	+ 3
April	−11	−11	−13	+12	+12	+12	+ 2	− 8	−16	− 8	+ 8	− 6	+ 1
May	−10	−11	−11	+10	+12	+10	+ 2	− 7	−19	− 7	+ 8	− 2	+ 4
June	− 8	−12	− 9	+ 8	+13	+ 8	+ 1	− 6	−14	+ 3	+ 6	− 2	+ 2
July	− 7	−12	− 7	+ 7	+13	+ 5	+ 1	− 6	−11	+ 4	− 2	− 3	+ 7
August	− 7	−12	− 3	+ 7	+13	+ 7	+ 1	− 8	−15	+ 2	+ 2	+ 2	+ 6
September	− 7	−12	+ 2	+ 7	+12	+ 9	+ 2	−10	−14	+ 2	+ 7	+ 2	+ 1
October	− 7	−12	+ 6	+ 7	+12	+10	+ 2	−12	−12	+ 1	+ 5	+ 8	+ 8
November	− 7	−12	+ 6	+ 9	+12	+10	− 2	−15	−11	+ 2	+ 7	+ 2	+ 7
December	− 8	−13	+ 7	+11	+11	+ 9	− 6	−18	− 9	+ 3	+ 1	+ 3	+ 5

	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902
January	+11	+ 5	+ 9*	+12	−14	− 3	− 1	−13	− 3	+ 1	+10	− 1	+ 2
February	+ 8	+ 1	+14	+12	−16	− 9	− 2	−11	− 2	+ 1	+11	0	+ 2
March	+10	− 5	+11	+12	−14	−10	− 7	−12	− 3	+ 4	+10	+ 2	+ 2
April	+12	− 6	+ 9	+11	−14	−11	− 5	−12	− 7	+ 1	+ 8	+ 5	+ 5
May	+17	− 7	+ 7	+11	−14	− 8	− 8	−15	− 7	+ 2	+ 6	+ 4	+ 5
June	+15	0	+ 9	+ 5	−20	− 6	− 8	−13	− 4	+ 3	+ 6	+ 3	+ 2
July	+16	+ 8	+ 6	− 2	−18	− 1	− 8	−14	− 8	+ 3	+ 4	+ 4	+ 4
August	+12	+ 7	+ 6	−13	−10	0	−14	−10	− 5	+ 6	0	+ 4	+ 3
September	+15	+13	+ 7	−17	− 7	+ 1	−16	− 3	− 5	+ 8	− 3	0	+ 6
October	+17	+12	+ 8	−17	− 7	+ 6	−17	− 4	− 7	+ 9	− 3	+ 3	+ 5
November	+ 8	+ 7	+10	−16	− 6	+ 4	−16	− 4	− 4	+ 8	− 4	+ 2	+ 2
December	+ 5	+ 7	+12	−15	− 4	+ 3	−13	− 2	− 2	+11	− 4	+ 1	+ 3

	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915
January	+ 3*	−10	− 5	+10	+17	−14	− 5*	+12	0	− 2	+10*	0	−16
February	+ 1	− 5	− 5	+ 9	+14	−15	− 5	+10	− 1	+ 3	+ 8	− 2	−13
March	+ 2	− 8	− 2	+ 7	+15	−15	− 5	+12	0	+ 3	+ 3	0	−12
April	+ 4	− 6	− 1	+ 5	+16	−14	− 5	+11	− 3	+ 6	+ 5	− 1	− 9
May	+ 3	− 8	0	+ 8	+18	−17	− 3	+ 6	− 2	+ 5	+ 5	− 5	− 8
June	+ 2	−10	0	+ 7	+16	−17	− 2	+ 7	− 1	+ 3	+ 4	− 4	− 4
July	+ 3	−12	− 1	+ 7	+18	−16	+ 1	+ 4	− 2	+ 5	+ 5	− 2	− 3
August	− 1	−12	0	+ 8	+16	−13	+ 2	+ 4	− 1	+ 6	+ 2	− 8	− 2
September	− 2	− 8	+ 2	+ 5	+12	−11	+ 5	+ 4	− 1	+ 5	+ 3	−10	+ 2
October	− 6	− 9	+ 2	+10	+13	−11	+ 8	+ 4	− 1	+ 8	+ 5	−13	+ 5
November	−11	− 4	+ 4	+11	− 4	− 9	+ 9	+ 2	− 1	+ 7	− 1	−17	+ 9
December	−14	− 5	+ 7	+13	−12	− 8	+10	+ 1	− 2	+ 7	− 2	−18	+14

	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
January	+11	+17	+ 4	+ 4*	+13	−19*	−16	+ 8	+ 4	+ 7	
February	+12	+13	+ 3	− 3	+10	−18	−11	+ 8	+ 7	+ 7	
March	+13	+14	+10	− 8	+12	−22	−10	+10	+ 2	+ 5	
April	+ 9	+12	+10	− 6	+ 9	−25	−16*	+ 9	0	+ 4	
May	+12	+14	+13	− 2	+ 6	−25	−14	+10	− 8	0	
June	+11	+12	+10	0	+ 8	−23	−11	+ 7	−16	− 2	
July	+ 8	+10	+14	+ 7	+ 8	−25	−12	+ 6	−14	+ 1	
August	+12	+10	+15	+ 9	+ 7	−21	−10	+ 5	−12	+ 3	
September	+13	+ 7	+11	+ 8	+ 5	−19	− 5*	+ 1	− 7	+ 2	
October	+15	+ 9	+10	+ 7	− 1	−18	− 1	+ 1*	− 2	+ 5	
November	+17	+11	+ 5	+ 4	− 6	−15	+ 4	0	− 1	+ 8	
December	+16	+ 6	+ 6	+ 8	−11	−14	+ 4	− 2	+ 4	+10	

* Denotes months in which composition of curve changes.

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VI. STATISTICS RELATING TO STOCKS AND BONDS

(a) New York Stock Exchange Transactions

Monthly Volume of Stock Sales

Unit: 1,000,000 Shares

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
1926	39.09	35.46	52.04	30.22	23.19	37.99	36.73	44.19	36.90	40.21	31.18	41.89	37.42
1925	41.43	32.75	38.57	24.84	36.46	30.86	32.28	32.87	36.89	53.42	48.98	42.88	37.69
1924	26.73	20.64	18.21	17.79	14.99	16.80	24.23	22.43	18.15	17.83	41.37	42.88	23.50
1923	20.21	22.69	25.86	20.04	23.11	19.65	12.67	15.98	14.61	15.82	22.57	24.07	19.77
1922	15.39	16.19	22.73	30.47	28.91	24.04	15.15	17.85	21.78	25.68	22.88	19.69	21.73
1921	15.98	10.15	15.91	15.27	17.03	18.17	9.30	10.99	12.91	12.88	15.33	17.62	14.30
1920	19.65	21.73	28.80	27.98	16.37	9.20	12.40	13.70	15.32	13.61	22.16	23.83	18.73
1919	11.63	12.05	21.17	27.66	34.24	32.83	34.17	24.14	23.88	36.89	29.97	24.26	26.07
1918	13.50	11.32	8.21	7.44	21.10	11.60	8.35	6.86	8.03	20.29	14.72	11.96	11.95
1917	16.42	13.63	18.42	14.28	19.54	18.99	12.79	11.51	13.70	17.43	14.71	12.78	15.35
1916	15.94	12.20	15.13	12.53	16.40	12.79	9.18	14.60	29.85	27.98	34.51	31.71	11.07
1915	5.08	4.38	7.88	21.05	12.67	11.21	14.33	20.42	18.50	26.64	17.56	13.68	14.45
1914	10.11	6.23	5.86	7.14	4.76	4.00	7.89	—Exchange Closed—				1.91	6.57
1913	8.73	6.64	7.18	8.46	5.46	9.59	5.12	6.08	7.68	7.41	3.77	7.15	6.94
1912	10.91	7.09	14.55	15.99	13.66	7.20	7.17	8.97	10.06	14.15	8.71	12.60	10.92
1911	10.38	10.17	6.92	5.04	10.69	10.43	5.44	15.04	17.37	11.05	14.90	9.07	10.54
1910	24.12	15.99	14.99	14.07	11.95	16.28	14.30	10.22	7.68	13.43	10.81	9.89	13.64
1909	17.27	12.34	13.65	18.97	16.51	20.36	12.81	24.51	20.05	21.71	18.74	17.49	17.87
1908	16.62	9.92	15.80	11.61	20.92	9.54	13.87	18.85	17.50	14.27	24.88	22.96	16.40
1907	22.89	16.48	32.25	19.22	15.76	9.73	12.80	14.50	12.14	17.31	9.65	12.54	16.27
1906	38.55	21.69	19.33	24.30	23.95	20.28	16.30	31.72	26.12	21.80	19.41	20.26	23.64
1905	20.77	25.36	29.06	29.37	20.54	12.54	13.02	20.25	16.09	17.74	26.88	31.41	21.92
1904	12.24	8.57	11.42	8.16	5.26	4.99	12.13	12.44	18.70	32.48	31.96	28.18	15.54
1903	16.01	10.93	15.02	12.24	12.46	15.54	14.78	14.46	10.71	12.67	10.74	15.18	13.40
1902	14.76	12.95	11.95	26.58	13.49	7.81	16.32	14.32	20.95	16.35	17.12	15.72	15.69
1901	30.21	21.88	27.00	41.69	35.20	19.82	15.92	10.77	14.03	14.02	18.36	16.67	22.13
1900	9.86	10.21	14.45	14.65	9.49	7.29	6.27	4.01	5.16	10.90	22.65	23.38	11.53
1899	24.14	15.98	17.68	16.98	14.79	10.88	8.02	12.81	12.35	10.80	13.58	17.05	14.59
1898	9.22	8.98	9.95	6.00	9.17	9.10	4.78	12.01	9.37	7.42	10.94	15.22	9.35
1897	3.37	2.82	5.07	3.54	4.21	6.42	7.01	11.46	13.09	8.01	5.76	7.44	6.52
1896	4.40	5.19	4.58	4.06	2.78	4.36	5.54	4.27	4.57	4.90	5.87	2.92	4.45
1895	3.24	3.02	5.11	5.00	8.89	6.00	5.85	5.28	6.81	5.21	4.99	6.75	5.51
1894	4.59	3.17	4.73	4.01	5.07	3.38	2.82	5.04	4.07	3.84	4.53	4.07	4.11
1893	10.56	10.82	7.54	6.24	8.81	4.82	5.89	4.90	4.71	6.06	5.45	4.89	6.72
1892	9.83	11.43	8.90	6.83	6.15	4.66	3.47	5.47	6.85	7.02	5.82	8.31	7.06
1891	5.23	3.23	3.34	6.92	6.17	3.90	3.44	5.78	11.00	6.58	5.24	6.85	5.64
1890	6.37	5.20	4.47	4.97	1.99	5.27	3.03	3.98	7.95	7.05	8.92	4.95	5.35
1889	4.90	5.95	6.16	4.83	1.75	6.69	5.58	5.04	5.59	7.56	6.97	5.46	5.54

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Par Value of Bond Sales

Unit: $1,000,000

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
1926.....	304.5	241.6	268.8	305.6	238.9	267.2	214.4	182.3	191.9	227.0	276.2	311.3	252.5
1925.....	364.0	319.2	312.6	276.3	346.4	283.7	264.6	217.7	239.8	261.9	242.6	269.5	283.2
1924.....	354.0	235.2	282.5	281.7	279.1	394.8	348.7	314.3	263.1	291.5	394.8	388.3	319.0
1923.....	287.7	261.2	268.1	242.3	268.1	244.3	178.4	157.5	156.7	225.2	227.5	236.6	229.5
1922.....	416.8	314.5	420.4	461.4	382.2	332.6	306.5	309.9	295.8	364.7	271.9	222.0	341.6
1921.....	295.7	225.1	227.4	231.0	242.7	311.0	242.8	227.8	337.6	347.0	411.5	418.1	293.1
1920.....	362.4	300.4	310.2	342.2	367.0	319.7	238.0	215.0	286.5	331.7	319.6	562.2	329.7
1919.....	277.1	239.1	259.6	300.1	291.7	243.2	263.5	250.7	289.9	308.0	358.7	689.5	314.3
1918.....	107.3	84.7	119.6	128.3	166.5	143.5	120.5	167.3	179.7	233.9	256.2	385.7	174.4
1917.....	125.4	78.3	74.7	96.5	76.5	57.6	63.8	67.1	83.4	118.7	97.6	112.7	87.7
1916.....	115.5	83.4	80.8	78.3	98.6	85.1	67.7	84.7	97.4	151.9	121.6	96.7	96 8
1915.....	56.5	43.7	62.8	110.1	64.2	57.9	56.5	73.1	81.7	104.5	124.7	120.5	79.7
1914.....	89.4	69.4	60.6	55.8	44.4	53.8	51.7	Exchange Closed			2.0	34.8	57.5
1913.....	54.5	47.8	40.4	55.5	42.2	42.4	34.6	29.4	35.0	41.1	32.7	45.5	41.8
1912.....	112.9	51.8	68.9	63.5	61.0	45.7	51.9	44.7	45.0	46.3	38.6	43.8	56.2
1911.....	90.7	72.3	64.0	55.6	92.9	90.6	60.5	47.9	62.7	73.3	88.4	90.7	74.1
1910.....	87.3	63.8	75.5	51.1	41.4	48.4	38.4	31.0	46.1	56.9	42.1	52.3	52.9
1909.....	137.9	110.8	85.8	138.9	116.8	136.4	94.3	113.3	91.8	91.4	85.1	112.3	109.6
1908.....	90.2	56.3	62.9	79.8	98.9	57.1	80.5	82.6	52.9	90.7	136.6	165.7	87.9
1907.....	53.3	31.9	54.0	43.3	34.0	21.7	25.3	30.2	36.4	62.7	70.6	63.9	43.9
1906.....	105.3	59.9	53.1	63.4	60.9	53.9	36.5	55.4	44.8	56.9	41.8	44.4	56.4
1905.....	138.6	112.9	104.2	75.1	70.1	80.9	54.3	88.1	68.9	74.0	78.3	72.6	84.8
1904.....	79.6	36.0	46.8	57.1	37.6	48.7	62.1	68.4	115.1	150.0	216.9	118.2	86.4
1903.....	66.8	65.6	51.9	47.8	51.7	57.9	57.5	51.6	45.3	73.6	50.4	64.0	57.0
1902.....	94.0	84.2	67.0	114.9	63.1	64.2	72.0	53.6	94.6	68.7	54.5	60.6	74.3
1901.....	94.4	103.7	132.4	115.9	109.9	79.9	49.5	36.8	44.7	65.0	90.9	75.4	83.2
1900.....	47.8	44.7	68.9	59.6	39.4	29.8	23.8	20.1	18.4	42.3	79.4	103.4	48.1
1899.....	144.8	91.5	89.6	84.5	83.5	57.9	49.7	55.3	36.2	47.3	48.3	47.8	69.7
1898.....	93.9	96.3	52.1	28.5	54.8	70.7	73.9	98.9	53.1	59.7	109.2	131.4	76.9
1897.....	40.3	41.2	36.1	22.1	25.7	46.1	54.0	75.5	68.8	39.9	33.7	62.9	45.5
1896.....	39.4	47.1	35.5	40.3	23.9	26.0	21.6	18.5	25.0	28.7	47.9	35.7	32.5
1895.....	29.2	18.5	35.0	51.6	79.9	46.4	42.8	47.5	41.2	38.7	33.9	39.7	42.0
1894.....	29.1	24.2	44.7	36.1	25.5	22.5	17.3	36.3	26.7	26.5	33.2	31.3	29.5
1893.....	49.0	48.5	33.0	24.9	26.2	20.3	19.9	29.5	21.9	25.9	29.6	27.6	29.7
1892.....	69.6	77.0	44.8	42.9	48.8	32.2	28.1	29.6	27.1	28.4	27.9	33.0	40.8
1891.....	43.1	27.6	21.2	33.1	19.8	13.4	16.0	33.6	53.5	34.9	30.7	15.0	28.5
1890.....	45.0	32.8	32.4	46.0	8.0	33.9	23.8	16.2	27.9	27.9	36.9	26.5	29.8
1889.....	51.8	47.3	33.6	36.4	8.8	35.2	22.3	18.0	23.3	24.9	32.9	31.3	30.5

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(b) Dow Jones Stock Price Averages—20 Industrials*

Unit: Average in dollars per share

	1926		1925		1924		1923		1922		1921		1920		1919	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
Jan.	159.00	153.20	123.60	119.46	100.66	94.88	99.42	96.96	82.57	78.59	76.76	72.67	109.88	101.90	83.35	79.88
Feb.	162.31	154.45	122.86	117.96	101.31	96.33	103.90	97.71	85.81	81.68	77.14	74.34	103.01	89.98	85.68	79.15
Mar.	153.13	135.40	125.68	115.00	98.86	92.28	105.38	102.36	89.05	85.33	77.78	72.25	104.17	91.68	89.05	84.04
Apr.	144.83	136.27	122.02	117.40	94.69	89.18	102.70	98.38	93.46	89.08	78.86	75.06	105.65	93.16	93.51	88.84
May	143.43	137.16	129.95	121.10	92.47	88.33	98.19	92.77	96.41	91.50	80.03	73.44	94.75	87.36	105.50	93.26
June	154.03	142.30	131.01	126.75	96.37	90.15	97.24	87.85	96.36	90.73	73.51	64.90	93.20	90.16	107.55	99.50
July	160.58	153.01	136.50	131.33	102.14	96.38	91.72	86.91	97.05	92.90	69.86	67.25	94.51	86.85	112.23	107.16
Aug.	166.64	160.41	143.18	134.45	105.57	101.50	93.70	87.20	100.78	96.21	69.95	63.90	87.29	83.20	107.99	98.46
Sept.	166.10	156.26	147.73	137.22	104.95	100.76	93.61	87.89	102.05	96.30	71.92	66.83	89.95	82.95	111.42	104.99
Oct.	159.69	145.66	156.52	144.77	104 08	99.18	90.45	85.76	103.43	96.11	73.93	69.46	85.73	84.00	118.92	108.90
Nov.	157.37	150.51	159.39	148.18	111.38	103.89	92.88	88.41	99.53	92.03	78.01	73.44	85.48	73.12	119.62	103.60
Dec.	161.86	156.65	157.01	152.11	120.51	110.44	95.61	92.64	99.02	95.03	81.50	78.12	77.63	66.75	107.97	103.55
Year's range	166.64	135.40	159.39	115.00	120.51	88.33	105.38	85.76	103.43	78.59	81.50	63.90	109.88	66.75	119.62	79.15

	1918		1917		1916		1915		1914		1913		1912		1911		1910		1909		1908	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
Jan.	79.80	73.38	99.18	95.13	98.81	90.58	58.52	54.63	82.88	78.43	88.57	81.55	82.36	80.19	84.93	81.70	98.34	90.66	86.95	84.09	65.84	59.61
Feb.	82.08	77.78	94.91	87.01	96.15	90.89	57.83	54.22	83.19	81.31	83.64	78.72	81.57	80.15	86.02	84.33	91.34	85.03	86.72	79.91	62.14	58.62
Mar.	79.93	76.24	98.20	91.10	96.08	90.52	61.30	55.29	83.43	81.12	81.69	78.25	88.62	81.96	84.53	81.80	94.56	89.47	86.12	81.64	69.92	60.97
Apr.	79.73	75.58	97.06	90.66	94.46	84.96	71.78	61.05	82.47	76.97	83.19	78.39	90.93	88.72	83.65	81.32	92.62	86.20	88.29	85.37	70.29	67.04
May	84.04	78.08	97.58	89.08	92.62	87.71	71.51	60.38	81.66	79.16	79.95	78.38	90.48	87.59	86.40	82.60	89.66	84.72	92.18	88.32	75.12	69.78
June	83.02	77.93	99.08	94.78	93.61	87.68	71.90	64.86	81.84	79.30	77.27	72.11	91.09	88.32	87.06	85.79	86.28	81.18	94.46	89.66	74.38	71.70
July	83.20	80.51	95.31	90.48	90.53	86.42	75.79	67.88	81.79	71.42	79.06	75.23	91.69	87.97	86.47	85.28	81.64	73.62	96.79	92.82	80.34	72.76
Aug.	83.18	80.71	93.85	83.40	93.83	88.15	81.95	76.46	Exch. Closed		81.81	78.21	92.06	89.84	85.47	78.93	81.41	76.14	99.26	96.30	85.40	80.57
Sept.	84.68	80.29	86.02	81.20	103.73	91.19	90.58	80.40	Exch. Closed		83.43	80.27	94.15	90.38	80.28	72.94	79.72	78.35	100.12	95.86	84.55	77.07
Oct.	89.07	83.36	83.58	74.50	105.28	98.94	96.46	88.23	Exch. Closed		81.43	77.09	94.12	90.35	78.66	74.82	86.02	79.95	100.50	95.70	83.55	79.50
Nov.	88.06	79.87	74.23	68.58	110.15	105.63	97.56	91.08	Exch. Closed		78.42	75.94	91.94	89.58	81.86	77.69	85.85	82.52	100.53	95.89	88.38	82.90
Dec.	84.50	80.44	74.38	65.95	106.81	90.16	99.21	94.78	*56.76	*53.17	78.85	75.27	90.85	85.25	82.48	79.19	82.16	79.68	99.28	96.66	87.67	83.46
Year's range	89.07	73.38	99.18	65.95	110.15	84.96	99.21	54.22	83.43	53.17	88.57	72.11	94.15	80.15	87.06	72.94	98.34	73.62	100.53	79.91	88.38	58.62

	1907		1906		1905		1904		1903		1902		1901		1900		1899		1898		1897	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
Jan.	96.37	90.77	103.00	94.44	71.33	68.76	50.50	47.07	66.33	64.19	65.17	62.57	70.44	64.77	68.13	63.27	65.02	60.41	50.67	48.00	43.25	40.37
Feb.	93.39	89 75	101.71	93.94	76.16	70.91	49.03	46.71	67.70	65.53	65.58	64.58	70.78	67.00	68.36	63.35	67.52	61.95	50.23	44.67	42.38	39.72
Mar.	90.12	75.39	96.96	92.90	80.02	75.92	49.12	46.41	66.01	62.86	67.52	64.77	69.92	67.18	66.02	61.11	74.70	65.90	47.47	42.00	42.29	39.13
Apr.	84.80	81.40	98.19	88.70	83.75	76.08	49.98	48.62	64.56	60.79	68.44	65.95	75.89	70.91	66.15	60.47	77.28	72.60	46.32	43.27	40.43	38.49
May	85.02	77.30	93.77	86.45	78.05	71.37	48.71	47.43	64.06	60.27	67.11	64.73	75.93	67.38	61.36	56.62	76.04	67.51	52.74	48.30	39.95	38.67
June	80.36	77.40	95 21	87.01	77.78	72.53	49.47	48.08	59.90	56.65	66.26	63.67	78.26	76 07	59.38	53.68	73.08	68.40	53.71	50.87	44.61	40.01
July	82.52	78.87	92.41	85.18	81.70	77.48	53.14	49.31	58.81	49.08	67.28	64.25	77.08	59.46	59.02	55.48	73.73	70 55	54.20	52.27	47.95	43.60
Aug.	78.87	69.25	96.08	91.67	82.82	80.63	54.61	52.68	53.88	47.38	66.78	65.33	73.83	69.05	58.90	57.06	76.23	73.68	60.97	54.60	54.81	48.84
Sept.	73.89	67.16	96.07	93.31	81.91	78.60	57.59	54.94	52.75	45.09	67.77	64.07	73.27	66.22	58.58	52.96	77.61	72.39	60.50	53.44	55.82	50.98
Oct.	67.95	57.23	96.75	92.76	83.77	80.83	64.54	57.59	47.62	42.25	66.58	60.84	66.07	63.48	60.79	54.52	74.97	70.95	55.43	51.56	52.66	48.42
Nov.	58.48	53.00	95.33	92.38	89.89	80.83	72.36	63.72	45.46	42.15	65.80	60.62	66.52	64.48	69.07	59.18	75.93	73.06	57.20	54.51	49.11	45.65
Dec.	61.77	56.85	95.89	92.94	96.56	89.50	73.23	65.77	49.35	44.35	64.29	59.57	64.87	61.52	71.04	63.98	75.68	58.27	60.52	58.14	49.81	48.14
Year's range	96.37	53.00	103.00	85.18	96.56	68.76	73.23	46.41	67.70	42.15	68.44	59.57	78.26	61.52	71.04	52.96	77.61	58.27	60.97	42.00	55.82	38.49

* Prior to Dec. 12, 1914, the list consisted of 12 industrials. For the period December, 1914, to October, 1916, quotations for both series are available, both series showing the same fluctuation. Over this period the average of the twelve was $108.90, and of the twenty was $81.60.

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(c) Standard Bank Stock Price Indexes

Based on the first of the month bid prices, weighted in proportion to the number of shares of stock outstanding October 1, 1925. The average price is shown in dollars per share. The last three tables show subdivisions of the 18 stocks used in the primary index.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
18 Bank Stocks													
1926	696.0	697.5	715.0	671.0	672.0	670.2	685.7	689.0	700.7	693.3	688.0	713.6	691.0
1925	560.5	574.1	565.1	553.8	553.3	575.9	615.5	633.4	640.1	650.2	686.9	693.0	608.5
1924	424.8	438.2	438.4	439.3	441.4	440.6	456.0	484.9	494.3	496.1	501.6	543.9	466.6
1923	400.8	404.1	411.1	414.7	412.7	411.1	407.3	407.7	410.3	410.6	414.0	422.8	410.6
1922	345.9	347.2	347.3	347.9	353.7	362.5	371.2	375.7	381.2	395.6	400.3	400.2	369.1
1921	330.8	343.8	351.3	342.3	340.7	347.2	329.9	328.1	327.2	326.6	326.8	332.6	335.6
1920	443.2	429.3	408.3	412.6	403.2	395.3	395.9	387.5	359.4	365.1	363.6	352.1	393.0
1919	418.4	416.8	417.7	421.5	440.1	445.6	458.3	456.9	446.4	448.1	470.9	469.6	442.5
1918	368.9	383.9	391.8	377.5	376.3	370.2	367.7	369.3	369.6	365.9	374.5	410.0	377.1
1917	479.9	476.8	454.8	471.7	461.8	445.0	428.4	434.4	432.9	422.8	400.2	374.9	440.3
9 Trust Companies													
1926	594.6	551.2	619.0	587.0	570.0	578.5	596.6	599.4	610.9	611.0	608.0	626.0	593.8
1925	504.9	503.8	485.5	478.6	479.5	505.0	528.1	556.4	559.4	571.8	591.6	588.1	529.4
1924	378.7	399.8	399.1	397.8	396.9	395.5	400.2	427.1	445.2	445.1	447.4	467.0	416.7
1923	362.9	370.8	386.1	386.7	382.3	379.4	375.1	374.6	376.5	373.5	373.8	381.7	377.0
1922	304.7	314.5	315.2	316.5	317.2	323.3	331.3	337.7	337.7	354.3	359.2	358.3	330.8
1921	319.5	339.1	338.4	324.0	323.4	321.2	300.9	301.1	299.3	288.1	293.7	296.5	312.1
1920	418.9	411.0	387.9	391.6	378.2	369.0	364.6	373.0	368.7	363.0	356.0	334.5	376.4
1919	406.2	393.6	402.7	407.7	429.3	430.6	441.6	441.0	430.4	433.2	450.5	446.0	426.1
1918	388.9	414.8	419.0	403.3	397.7	366.5	361.7	364.9	360.6	353.3	362.6	421.8	384.6
1917	517.8	519.3	497.0	517.6	502.8	502.8	453.4	465.8	461.9	447.7	414.0	394.3	474.5

The stocks included in the above price averages are: Bankers Trust Co.; Brooklyn Trust Co.; Central Union Trust Co.; Empire Trust Co.; Farmers' Loan & Trust Co.; Fulton Trust Co.; Guaranty Trust Co.; Peoples Trust Co.; U. S. Trust Co.

6 Commercial, National and State Banks													
1926	545.6	551.2	541.0	512.0	525.0	528.5	543.0	542.8	542.2	541.3	541.8	561.5	539.7
1925	468.8	469.9	476.1	470.1	468.6	479.4	504.2	504.6	515.0	527.7	552.0	550.4	498.9
1924	390.1	400.0	409.3	411.3	414.2	413.5	413.5	432.9	434.0	440.6	444.8	455.9	421.7
1923	377.5	381.0	381.4	382.6	379.6	378.5	374.1	374.5	380.8	379.6	387.2	396.4	381.1
1922	321.4	323.5	328.9	328.1	334.5	342.1	345.0	346.9	357.4	360.7	373.8	385.9	345.7
1921	270.0	280.7	286.7	284.2	286.5	287.0	278.2	284.2	287.5	299.0	302.4	309.9	288.0
1920	333.4	333.1	318.5	317.2	304.7	304.4	311.0	295.2	292.7	293.9	296.2	291.9	307.7
1919	271.3	278.8	278.7	279.8	308.4	315.4	319.7	310.4	312.8	315.5	330.2	339.0	305.0
1918	225.2	238.5	237.3	235.1	238.5	244.5	241.1	241.1	241.6	238.9	248.2	263.3	241.1
1917	262.9	267.9	258.0	255.7	253.0	244.4	244.4	244.9	244.7	240.8	237.7	231.3	248.8

The stocks included in the above price averages are: Corn Exchange Bank; Colonial Bank; Fifth Ave. Bank; Hanover National Bank; National Bank of Commerce; State Bank.

3 National Banks Owning Security Companies													
1926	882.5	875.0	908.1	847.0	857.0	842.0	856.3	862.1	881.3	861.0	851.6	888.1	867.7
1925	670.2	696.6	692.0	673.9	672.6	699.2	763.1	780.8	788.9	795.5	855.0	875.1	746.9
1924	490.1	498.7	494.1	496.4	501.2	500.7	536.2	572.9	583.2	579.4	588.7	671.2	542.7
1923	451.2	450.0	452.7	460.6	461.7	461.0	457.9	459.3	460.3	465.3	468.7	478.1	460.6
1922	399.2	392.1	388.7	389.2	399.6	411.6	424.7	429.0	437.0	455.6	455.2	448.9	419.2
1921	375.4	383.1	399.7	392.5	387.5	406.1	386.9	379.0	376.7	379.8	372.0	379.8	384.9
1920	543.9	509.4	487.0	495.5	492.7	481.7	484.3	462.4	385.9	405.1	407.2	401.7	463.1
1919	524.4	530.4	524.2	528.5	537.3	546.6	566.8	570.5	551.6	550.9	585.5	581.5	549.9
1918	438.3	443.4	462.2	440.3	440.8	453.0	453.9	454.4	460.1	459.8	467.2	508.6	456.8
1917	579.1	566.8	537.5	562.7	553.2	515.2	517.8	520.7	520.7	511.1	487.6	444.9	526.4

The stocks included in the above price averages are: Chase National Bank; First National Bank; National City Bank.

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(d) Standard Index of High-Grade Bond Yields

60 Issues Combined

Unit: Per Cent

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg
1926	4.66	4.63	4.63	4.61	4.58	4.58	4.60	4.59	4.60	4.60	4.56	4.55	4.60
1925	4.78	4.76	4.76	4.72	4.67	4.66	4.69	4.72	4.72	4.73	4.74	4.70	4.72
1924	4.95	4.95	4.96	4.95	4.90	4.84	4.80	4.80	4.78	4.77	4.76	4.78	4.85
1923	4.86	4.89	4.97	5.00	4.98	4.98	5.01	4.99	5.02	5.02	5.01	5.01	4.98
1922	5.17	5.13	5.07	4.97	4.94	4.93	4.87	4.81	4.77	4.82	4.90	4.87	4.94
1921	5.80	5.88	5.91	5.90	5.91	6.00	5.97	5.85	5.76	5.69	5.50	5.29	5.79
1920	5.50	5.64	5.65	5.81	6.00	6.10	6.11	6.06	5.95	5.81	5.86	6.03	5.88
1919	5.14	5.14	5.18	5.20	5.17	5.17	5.20	5.30	5.32	5.28	5.39	5.48	5.25
1918	5.19	5.16	5.20	5.28	5.25	5.27	5.28	5.31	5.35	5.30	5.08	5.08	5.23
1917	4.45	4.51	4.54	4.63	4.72	4.77	4.81	4.85	4.96	5.01	5.10	5.19	4.80
1916	4.53	4.52	4.53	4.54	4.55	4.55	4.56	4.56	4.54	4.50	4.48	4.49	4.53
1915	4.68	4.67	4.68	4.65	4.67	4.70	4.71	4.71	4.71	4.66	4.57	4.55	4.66
1914	4.64	4.58	4.56	4.57	4.57	4.54	4.58	——— Exchange Closed ———					4.58
1913	4.51	4.52	4.55	4.60	4.64	4.69	4.72	4.70	4.68	4.69	4.70	4.72	4.64
1912	4.44	4.42	4.43	4.45	4.44	4.44	4.44	4.45	4.46	4.48	4.51	4.51	4.46
1911	4.43	4.43	4.43	4.43	4.40	4.41	4.41	4.43	4.45	4.45	4.45	4.44	4.43
1910	4.35	4.37	4.38	4.42	4.44	4.47	4.49	4.50	4.48	4.46	4.46	4.45	4.44
1909	4.34	4.32	4.34	4.32	4.32	4.32	4.32	4.32	4.33	4.34	4.35	4.36	4.33
1908	4.75	4.69	4.70	4.65	4.59	4.56	4.55	4.50	4.47	4.45	4.40	4.34	4.55
1907	4.26	4.30	4.34	4.36	4.38	4.45	4.47	4.55	4.59	4.68	4.87	4.83	4.51
1906	4.07	4.08	4.11	4.12	4.15	4.16	4.19	4.23	4.25	4.24	4.24	4.26	4.18
1905	4.08	4.06	4.06	4.07	4.07	4.07	4.06	4.06	4.05	4.06	4.07	4.06	4.06
1904	4.32	4.31	4.33	4.28	4.28	4.25	4.22	4.20	4.19	4.15	4.16	4.12	4.23
1903	4.12	4.11	4.14	4.17	4.17	4.21	4.26	4.32	4.33	4.32	4.35	4.33	4.24
1902	4.05	4.05	4.05	4.01	4.02	4.03	4.04	4.06	4.07	4.09	4.11	4.11	4.06
1901	4.10	4.09	4.06	4.05	4.06	4.04	4.06	4.08	4.07	4.08	4.07	4.08	4.07
1900	4.16	4.15	4.13	4.12	4.14	4.15	4.16	4.16	4.17	4.17	4.14	4.10	4.15

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Standard Liberty Bond Price Index

An average of monthly high and low prices *

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
1926	101.6	101.7	102.1	101.7	102.2	102.2	102.2	101.9	102.0	101.8	102.2	102.5	102.0
1925	101.9	101.9	101.7	101.9	102.3	102.6	102.4	101.8	101.7	101.6	101.4	101.4	101.9
1924	99.5	99.4	99.9	100.0	100.7	101.5	102.3	102.1	102.1	102.5	102.2	101.7	101.1
1923	98.7	99.0	98.4	98.3	98.6	‡98.6	98.6	98.6	98.4	98.0	98.4	98.6	98.4
1922	97.8	97.5	98.6	99.6	99.9	100.1	100.9	100.7	100.3	99.6	99.2	99.2	99.5
1921	90.7	90.5	90.8	91.1	90.7	90.8	90.9	91.2	92.0	94.2	96.3	97.3	92.2
1920	95.0	93.5	93.2	91.5	88.8	89.5	89.4	89.1	90.2	91.4	90.9	88.9	90.9
1919	95.3	94.9	95.0	95.2	96.6	96.9	96.5	96.3	96.8	96.9	96.1	95.6	96.0
1918	97.3	96.8	97.3	97.6	96.9	96.0	95.2	95.4	96.8	97.0	97.7	95.7	96.7
1917	.....	.....	.....	.....	.....	100.0	99.5	99.7	100.0	99.9	98.8	97.7	.....

* Following are the ten bonds averaged at present: Liberty 3½s, 1st 4s, 1st 4¼s, 1st–2nd 4¼s, 2nd 4s, 2nd 4¼s, 3rd 4¼s, 4th 4¼s, Victory 4¾s, Treasury 4¼s.

‡ The Victory 4¾s were retired in June and are no longer included in these averages. Their inclusion would increase the June average by 0.14.

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(e) New Capital Issues

Unit: $1,000,000

	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916
January	546.9	473.3	220.9	632.8	209.7	257.4	338.4	242.5	164.7	182.9	192.8
February	351.7	383.6	254.9	237.6	202.7	298.7	202.5	187.6	69.9	213.9	303.6
March	301.1	324.3	287.3	313.9	283.7	138.7	275.8	153.1	74.9	312.1	276.6
April	438.3	355.6	266.0	274.4	445.2	380.7	471.7	67.7	23.9	130.1	221.6
May	253.7	247.5	181.2	348.2	400.7	177.6	245.1	209.9	102.3	48.3	191.9
June	278.3	208.0	290.1	326.7	329.3	179.1	266.4	322.1	253.8	59.6	150.1
July	269.1	321.1	275.8	237.3	233.0	170.5	240.9	370.9	165.6	135.3	136.3
August	154.5	191.1	272.2	137.4	222.6	138.9	168.1	220.2	89.5	185.9	146.3
September	277.2	234.1	279.3	205.5	276.3	205.8	145.0	379.6	59.7	80.8	95.6
October	244.8	278.1	384.0	246.4	170.6	103.1	338.8	380.7	76.3	49.2	111.0
November	271.6	251.4	197.5	374.9	216.9	255.9	176.7	253.7	89.8	90.5	249.9
December	302.1	374.0	310.0	266.3	433.2	318.3	237.2	223.2	174.6	41.5	112.8
Total	3,689.3	3,642.0	3,219.1	3,601.4	3,423.9	2,624.9	3,106.6	3,011.2	1,344.8	1,530.0	2,186.5

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New Enterprises Incorporated

Unit: $1,000,000—Companies with authorized capital of $100,000 or over

	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916
January	1,040	677.7	878.7	909.7	843.7	1,243.4	2,280.5	492.1	287.6	312.5	331.7
February	2,675	431.2	658.0	700.7	591.4	654.4	1,158.9	323.6	182.2	350.5	414.4
March	749	806.4	808.9	500.8	731.9	954.7	1,375.8	370.9	197.1	420.6	258.6
April	1,012	886.6	528.9	1,006.3	792.4	987.9	1,354.3	515.7	255.7	439.5	223.9
May	867	616.1	519.9	817.2	938.2	601.0	1,417.6	748.7	309.3	484.7	557.7
June	757	1,003.3	455.0	1,403.3	297.6	676.0	1,323.2	1,255.4	227.2	423.2	326.4
July	455	1,066.9	512.2	724.9	634.3	281.8	1,260.4	1,419.5	185.7	493.0	262.6
August	506	972.7	399.0	335.5	646.6	580.1	941.3	822.7	144.8	462.1	158.9
September	580	572.8	478.7	500.8	650.0	489.8	951.0	1,947.0	214.8	257.4	201.5
October	901	585.4	543.5	704.0	651.6	503.4	1,179.8	2,363.6	134.2	381.1	359.0
November	553	1,241.6	574.1	811.8	808.7	368.0	895.6	1,341.4	131.1	371.9	273.0
December	852	1,020.5	867.7	955.6	813.9	618.6	860.8	1,077.5	130.0	221.4	296.2
Total	10,947	9,881.2	7,224.5	9,370.6	8,400.3	7,959.1	14,999.0	12,678.2	2,399.7	4,617.9	3,763.7

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(f) Standard Index of Industrial Common Stock Yields

Unit: Per Cent

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg
1926	4.85	4.79	5.17	5.37	5.39	5.44	5.37	5.27	5.25	5.41	5.43	5.29	5.25
1925	5.49	5.71	5.76	5.74	5.53	5.37	5.26	5.10	4.95	4.86	4.87	4.93	5.30
1924	6.08	6.10	6.17	6.30	6.21	6.13	6.34	5.98	5.99	5.69	5.57	5.67	6.02
1923	6.39	6.29	6.32	6.51	6.75	6.80	7.02	6.94	6.83	6.96	6.89	5.89	6.63
1922	7.19	6.92	6.73	6.44	6.37	6.41	6.28	6.04	5.76	5.70	5.78	6.11	6.31
1921	8.01	8.12	7.85	7.86	7.78	8.37	8.19	8.15	8.16	7.96	7.65	7.31	7.95
1920	6.51	7.03	6.87	6.87	7.43	7.54	7.69	8.00	7.80	7.71	8.06	8.53	7.50
1919	7.42	7.46	7.30	7.08	6.70	6.62	6.38	6.58	6.51	6.03	6.36	6.48	6.74
1918	7.86	7.34	7.66	7.75	7.51	7.47	7.69	7.88	7.49	6.95	7.02	7.06	7.47
1917	5.89	6.11	6.42	6.57	7.01	6.95	7.04	6.99	7.37	7.63	8.01	8.59	7.06
1916	5.48	5.65	5.86	6.04	5.94	5.92	5.94	5.92	5.66	5.62	5.58	5.92	5.79
1915	6.45	6.56	6.15	5.96	6.14	5.94	5.88	5.83	5.73	5.62	5.45	5.48	5.93
1914	5.99	5.81	6.02	6.00	6.13	6.17	6.45	—Exchange Closed—				6.56	6.14

The 33 stocks included in this group paid some dividend every year since 1914.

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The monthly dividend rate is assumed to be the same as the annual rate in effect at the time. Dividends are taken in dollars per share. Extra cash dividends, on an annual basis, are added to regular dividends and are considered to be part of such regular dividends until announcements of a revised dividend policy are made. Stock dividends are disregarded, as such readjustments are largely cared for in the market price of the stock.

The mathematical process followed was to divide the total annual dividend rate each month by the total of monthly prices, using the average of high and low monthly stock prices.

The 33 common stocks included in the average are: Am. Car & Fdry.; Am. Snuff; Am. Tel. & Tel.; Am. Tobacco; Associated Oil; Chic. Pneum. Tool; Cons. Gas. of N. Y.; Detroit Edison; Elec. Stor. Battery; General Elec.; Gt. North. Ore; Int. Harvester; Liggett & Meyers; Lorillard & Co.; Mackay Cos.; May Dept. Stores; Miami Copper; Montana Power; National Biscuit; National Lead, Philadelphia Co.; Pub. Serv. of N. J.; Pullman Co.; Standard Milling; Standard Oil of Cal.; Texas Co.; Underwood Type; United Fruit; Western Union; West. Air Brake; West. Elec. Mfg.; Woolworth (F. W.); Utah Copper.

VII. DATA ON BUSINESS CONDITIONS

(a) Unfilled Orders of the U. S. Steel Corporation

Unit: 1,000,000 Gross Tons

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg
1926	4.88	4.62	4.38	3.87	3.65	3.48	3.60	3.54	3.59	3.68	3.81	3.96	3.92
1925	5.04	5.28	4.86	4.45	4.05	3.71	3.54	3.51	3.72	4.11	4.58	5.03	4.32
1924	4.80	4.91	4.78	4.21	3.63	3.26	3.19	3.29	3.47	3.53	4.03	4.82	3.99
1923	6.91	7.28	7.40	7.29	6.98	6.39	5.91	5.42	5.04	4.67	4.37	4.45	6.01
1922	4.24	4.14	4.49	5.10	5.25	5.64	5.78	5.95	6.69	6.90	6.84	6.75	5.65
1921	7.57	6.93	6.24	5.85	5.48	5.12	4.83	4.53	4.56	4.29	4.25	4.24	5.32
1920	9.29	9.50	9.98	10.36	10.94	10.98	11.12	10.81	10.38	9.84	9.02	8.15	10.03
1919	6.68	6.61	5.43	4.80	4.28	4.89	5.58	6.11	6.28	6.47	7.13	8.27	6.01
1918	9.48	9.29	9.06	8.74	8.34	8.02	8.83	9.76	8.30	8.35	8.12	7.38	8.56
1917	11.47	11.58	11.71	12.18	11.89	11.38	10.84	10.41	9.83	9.01	8.90	9.38	10.72
1916	7.92	8.57	9.33	9.83	9.94	9.64	9.59	9.66	9.52	10.02	11.06	11.55	9.72
1915	4.25	4.35	4.26	4.16	4.26	4.68	4.93	4.91	5.32	6.17	7.19	7.81	5.19
1914	4.61	5.03	4.65	4.28	4.00	4.03	4.16	4.21	3.79	3.46	3.32	3.84	4.11
1913	7.83	7.66	7.47	6.98	6.32	5.81	5.40	5.22	5.00	4.51	4.40	4.28	5.91
1912	5.38	5.45	5.30	5.66	5.75	5.81	5.96	6.16	6.55	7.59	7.85	7.93	6.28
1911	3.11	3.40	3.45	3.22	3.11	3.36	3.58	3.70	3.61	3.69	4.14	5.08	3.62
1910	....	....	5.40	....	....	4.26	3.97	3.54	3.16	2.87	2.76	2.67	3.58
1909	....	....	3.54	....	....	4.06	....	....	4.80	....	....	5.93	4.58
1908	....	....	3.77	....	....	3.13	....	....	3.42	....	....	3.60	3.48
1907	....	....	6.97	....	....	6.48	....	....	5.35	....	....	4.62	5.86
1906	....	....	5.96	....	....	5.75	....	....	6.85	....	....	7.50	6.52
1905	....	....	4.70	....	....	3.90	....	....	5.02	....	....	6.50	5.03
1904	....	....	3.38	....	....	2.56	....	....	2.43	....	....	3.80	3.04
1903	....	....	4.21	....	....	3.77	....	....	3.00	....	....	2.61	3.40
1902	....	....	....	....	....	3.99	....	....	4.02	....	....	4.43	4.15

(b) Contracts Awarded for Building and Engineering Construction By the F. W. Dodge Corporation

Area

Unit: 1,000,000 sq. ft.

In 27 States

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
1926.....	54.58	41.84	70.06	72.57	71.36	66.06	58.22	65.71	64.66	62.83	61.04	55.44	62.04
1925.....	42.34	38.65	64.40	73.22	68.86	66.58	67.90	77.33	72.29	69.31	68.30	63.74	64.41
1924.....	49.87	48.06	68.43	63.35	57.70	48.06	41.18	41.85	43.15	47.49	49.00	46.80	50.48
1923.....	39.14	41.75	65.44	66.18	60.77	47.55	42.57	40.34	39.39	54.78	52.62	48.10	49.89
1922.....	30.36	30.65	52.89	59.49	60.18	61.09	52.49	54.38	44.82	47.06	47.79	39.94	48.43
1921.....	15.69	17.02	26.98	34.72	35.89	35.71	31.81	35.82	41.56	40.67	37.74	35.70	32.45
1920.....	42.56	35.55	55.12	51.63	42.32	37.13	28.33	28.59	27.26	25.95	19.58	14.33	34.03
1919.....	13.15	15.26	25.78	29.32	51.04	65.58	66.04	62.42	50.41	68.78	51.85	49.58	46.60

Value

Unit: $1,000,000

In 27 States

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Tot.
1926.....	377.6	288.5	490.3	471.7	461.8	471.3	444.6	527.9	487.7	451.2	421.2	481.0	447.9
1925.....	255.4	252.6	430.4	496.2	424.2	466.3	441.3	520.6	462.9	442.9	406.9	443.3	420.3
1924.....	261.3	259.3	386.5	426.1	358.6	331.1	287.3	299.5	297.9	344.9	341.3	283.1	3,877
1923.....	218.7	229.9	338.2	362.9	373.9	323.6	274.2	253.1	253.5	319.9	289.3	267.9	3,505
1922.....	166.3	172.7	293.4	353.0	361.8	342.4	350.1	322.0	271.5	253.1	243.4	214.2	3,344
1921.....	111.6	102.4	163.8	221.3	240.9	226.2	212.2	220.4	244.9	222.4	190.8	198.3	2,355
1920.....	226.1	205.3	302.2	304.9	264.9	260.1	204.5	202.7	182.2	178.6	132.9	100.1	2,565
1919.....	54.1	98.7	121.8	188.8	234.7	285.4	317.7	295.1	228.7	307.5	220.6	226.7	2,580
1918.....	161.6	137.3	115.3	128.9	120.4	248.2	153.0	146.4	124.5	166.1	130.3	57.3	1,689
1917.....	90.8	95.2	132.7	148.5	157.6	206.5	159.2	165.6	122.5	154.5	94.3	90.8	1,618
1916.....	62.8	66.3	94.5	100.9	131.4	140.7	114.4	127.0	132.2	151.4	122.4	112.9	1,357
1915.....	43.3	48.8	75.6	76.5	77.1	92.2	94.7	90.4	82.0	88.6	88.0	82.9	940
1914.....	51.1	39.1	58.9	79.7	72.0	81.8	72.0	77.3	47.1	53.4	45.5	42.3	720
1913.....	62.8	70.1	63.9	88.6	93.6	93.4	72.7	70.9	66.4	61.3	54.4	59.6	858
1912.....	38.9	42.1	73.4	77.8	94.8	79.0	76.6	76.2	68.7	115.9	60.1	64.7	868
1911.....	66.9	37.9	69.1	80.4	84.9	77.1	60.9	62.0	68.4	59.8	67.9	42.2	778
1910.....	39.0	50.9	83.0	83.9	109.2	88.1	72.3	62.8	43.8	61.0	62.3	49.4	806

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(c) Pig Iron Production

Unit: 1,000 Gross Tons

TOTAL MONTHLY PRODUCTION OF COKE AND ANTHRACITE PIG IRON IN U. S.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
1926	3,316	2,923	3,442	3,450	3,481	3,235	3,223	3,200	3,136	3,334	3,237	3,091	3,256
1925	3,370	3,214	3,564	3,259	2,931	2,673	2,644	2,704	2,726	3,023	3,023	3,250	3,034
1924	3,019	3,075	3,466	3,233	2,615	2,026	1,785	1,887	2,053	2,477	2,510	2,962	2,592
1923	3,230	2,994	3,524	3,550	3,868	3,676	3,678	3,449	3,126	3,149	2,894	2,921	3,338
1922	1,645	1,630	2,036	2,072	2,307	2,361	2,405	1,816	2,034	2,638	2,850	3,087	2,240
1921	2,416	1,937	1,596	1,193	1,221	1,065	865	954	986	1,247	1,415	1,649	1,379
1920	3,015	2,979	3,376	2,740	2,986	3,044	3,067	3,147	3,129	3,293	2,935	2,704	3,035
1919	3,302	2,940	3,090	2,478	2,108	2,115	2,429	2,743	2,488	1,864	2,392	2,633	2,549
1918	2,412	2,319	3,213	3,288	3,446	3,324	3,421	3,390	3,418	3,487	3,354	3,434	3,209
1917	3,151	2,645	3,251	3,335	3,417	3,270	3,342	3,248	3,134	3,303	3,206	2,883	3,182
1916	3,185	3,087	3,338	3,228	3,361	3,212	3,225	3,204	3,202	3,509	3,312	3,179	3,253
1915	1,601	1,675	2,064	2,116	2,263	2,381	2,563	2,780	2,853	3,125	3,037	3,203	2,472
1914	1,885	1,889	2,348	2,270	2,093	1,918	1,958	1,995	1,883	1,778	1,518	1,516	1,921
1913	2,795	2,586	2,764	2,753	2,822	2,629	2,561	2,540	2,506	2,546	2,233	1,984	2,560

AVERAGE DAILY PRODUCTION

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg.
1926	107.0	104.4	111.0	115.0	112.3	107.8	104.0	103.2	104.5	107.6	107.9	99.7	107.0
1925	108.7	114.8	115.0	108.6	94.5	89.1	85.9	87.2	90.9	97.5	100.8	104.9	99.8
1924	97.4	106.0	111.8	107.8	84.4	67.5	57.6	60.9	68.4	79.9	83.7	95.5	85.1
1923	104.2	106.9	113.7	118.3	124.8	122.3	118.7	111.3	104.2	101.6	96.5	94.2	109.7
1922	53.1	58.2	65.7	69.1	74.4	78.7	77.6	58.6	67.8	85.1	95.0	99.6	73.6
1921	77.9	69.2	51.5	39.8	39.4	35.5	27.9	30.8	32.9	40.2	47.2	53.2	45.3
1920	97.3	102.7	108.9	91.3	96.3	101.5	98.9	101.5	104.3	106.2	97.8	87.2	99.5
1919	106.5	105.0	99.7	82.6	68.0	70.5	78.3	88.5	82.9	60.1	79.7	84.9	83.8
1918	77.8	82.8	103.6	109.6	111.2	110.8	110.4	109.3	113.9	112.5	111.8	110.8	105.5
1917	101.6	94.5	104.9	111.2	110.2	109.0	107.8	104.5	104.5	106.6	106.9	93.0	104.6
1916	102.7	106.5	107.7	107.6	108.4	107.1	104.0	103.3	106.7	113.2	110.4	102.5	106.7
1915	51.7	59.8	66.6	70.6	73.0	79.4	82.7	89.7	95.1	100.8	101.2	103.3	81.3
Note: Data below are given to 0.01													
1914	60.81	67.45	75.74	75.67	67.51	63.92	63.15	64.36	62.75	57.36	50.61	48.90	63.15
1913	90.17	92.37	89.15	91.76	91.04	87.62	82.60	82 06	83.53	82.13	74.45	63.99	84.18
1912	66.38	72.44	77.59	79.18	81.05	81.36	77.74	81.05	82.13	86.72	87.70	89.77	80.28
1911	56.75	64.09	70.04	68.84	61.08	59.59	57.84	62.15	65.90	67.81	66.65	65.91	63.87
1910	84.15	85.62	84.46	82.79	77.10	75.52	69.31	67.96	68.48	67.52	63.66	57.35	73.58
1909	57.98	60.98	59.23	57.96	60.75	64.66	67.79	72.55	79.51	83.86	84.92	85.02	69.62
1908	33.72	37.16	39.62	38.29	37.60	36.44	39.29	43.85	47.30	50.55	52.60	56.16	42.74
1907	71.15	73.04	71.82	73.98	74.05	74.90	72.76	72.59	72.78	75.39	60.94	39.82	69.35
1906	66.74	68.00	69.86	69.11	67.70	65.89	64.95	62.15	65.70	70.87	72.92	72.11	68.00
1905	57.42	57.05	62.46	64.07	63.35	59.78	56.19	59.47	63.32	66.23	67.12	65.99	61.92
1904	29.72	41.57	46.68	51.84	49.46	43.07	35.68	37.67	45.09	46.94	49.55	52.13	43.85
1903	47.51	49.67	51.31	53.61	55.28	55.77	49.88	50.68	51.79	45.99	34.65	27.31	47.76
1902	46.38	44.92	46.61	49.18	49.77	48.23	46.52	47.36	47.29	47.77	47.76	49.59	47.67
1901	37.69	40.69	41.49	42.11	43.43	44.15	43.44	42.68	42.91	44.59	45.40	40.85	42.45
1900	41.33	41.25	40.65	40.75	41.26	40.40	36.63	32.94	31.42	30.27	30.78	33.24	36.73
1899	33.47	32.50	33.09	34.61	35.19	36.05	36.93	37.24	38.02	39.42	40.63	41.01	36.54
1898	31.84	32.40	32.69	32.58	31.95	30.74	29.42	29.14	29.83	30.99	32.39	33.44	31.44
1897	22.54	23 28	24.01	24.17	23.96	23.56	23.29	24.72	27.18	29.17	31.01	31.93	25 75
1896	28.20	26.90	26.17	26.21	25.82	25.06	23.21	19.58	16.35	16.04	18.03	20.82	22.72
1895	23.17	22.42	22.07	22.01	21.94	23.03	24.70	26.03	27.77	29.38	30.44	29.73	25.26
1894	14.12	14.96	16.94	16.95	12.25	10.47	14.38	19.03	21.57	22.53	23.86	24.28	17.63
1893	23.66	23.93	24.50	24.84	24.54	22.61	17.94	12.97	10.58	10.38	12.26	13.72	18.46
1892	25.50	25.87	25.74	24.71	23.80	23.18	22.08	20.84	20.99	22.40	23.69	23.90	23.55
1891	20.71	18.45	16.27	15.00	17.33	21.22	22.78	22.68	23.38	24.60	25.26	25.33	21.10
1890	23.20	23.64	24.01	24.08	24.14	23.70	22.67	22.36	23.20	23.62	23.99	23.32	23.49
1889	19.39	19.13	19.15	18.81	17.98	17.78	18.11	18.25	18.81	20.20	21.40	22.05	19.26
1888	16.18	14.47	14.27	14.94	15.42	15.08	15.11	16.01	16.80	17.79	19.04	20.05	16.27
1887	16.30	16.94	17.23	17.50	14.99	12.27	13.03	15.34	17.32	17.94	17.93	17.29	16.17
1886	12.03	12.28	12.16	14.11	15.10	15.67	15.39	15.10	14.69	15.23	15.67	15.81	14 45
1885	9.17	10.04	10.32	10.10	9.95	9.73	9.73	9.67	9.60	9.95	10.88	12.08	10.10
1884	10.61	9.69	9.71	9.72	11.03	10.83	10.77	10.07	9.80	9.23	9.80	9.65	10.08

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(d) Composite Pig Iron Price

Quoted in dollars per gross ton. Average of weekly averages.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg
1926.....	21.54	21.52	21.40	20.52	20.27	19.82	19.52	19.46	19.46	19.69	20.13	19.94	20.26
1925.....	22.44	22.50	22.10	20.95	19.84	19.22	18.96	19.01	19.38	19.92	21.17	21.54	20.59
1924.....	22.15	22.84	22.81	22.31	21.40	20.27	19.31	19.40	19.46	19.46	19.79	21.45	20.89
1923.....	26.78	27.20	30.11	30.83	29.74	28.23	25.96	25.19	25.02	23.30	21.40	21.88	26.30
1922.....	18.48	18.14	18.35	20.00	23.35	23.95	23.86	26.69	31.78	30.57	27.82	25.70	24.06
1921.....	31.18	28.45	25.18	23.73	22.78	21.73	20.22	18.97	19.89	19.97	19.79	19.11	22.58
1920.....	39.08	42.35	42.17	42.93	43.64	44.09	45.44	47.38	47.83	45.05	38.65	34.51	42.76
1919.....	31.36	31.36	30.10	27.11	26.91	26.46	26.37	26.83	27.11	27.52	30.34	36.13	28.97
1918.....	33.21	33.21	33.21	32.71	32.71	32.71	32.73	32.73	32.73	34.31	34.36	34.26	33.24
1917.....	28.88	29.75	32.18	38.56	41.87	47.95	52.11	51.43	46.93	33.21	33.21	33.21	36.11
1916.....	17.81	17.76	18.06	18.15	18.08	17.91	17.79	17.63	17.82	19.18	24.36	28.63	19.43
1915.....	12.38	12.38	12.34	12.37	12.37	12.45	12.55	13.55	14.28	14.67	15.82	17.34	13.54
1914.....	12.76	13.18	13.16	13.13	13.06	12.97	12.92	12.91	12.83	12.67	12.42	12.39	12.87
1913.....	16.49	16.31	16.07	15.74	14.98	14.35	13.99	13.93	13.97	13.93	13.39	13.06	14.68
1912.....	12.65	12.61	12.93	13.09	13.27	13.36	13.68	14.15	14.74	16.01	16.52	16.63	14.14
1911.....	13.63	13.83	13.88	13.79	13.53	13.27	13.21	13.12	12.99	12.84	12.71	12.59	13.28
1910.....	17.12	16.77	16.29	15.97	15.27	14.90	14.72	14.39	14.17	13.79	13.74	13.78	15.08
1909.....	15.68	15.35	15.03	14.38	14.38	14.71	15.18	15.52	16.41	17.25	17.46	17.26	15.72
1908.....	16.84	16.30	15.97	15.55	15.16	15.35	14.91	15.05	15.03	14.79	15.21	15.73	15.49
1907.....	23.24	23.33	23.02	23.03	23.97	23.47	22.51	21.82	20.55	19.88	18.66	17.52	21.75
1906.....	17.30	17.10	17.10	17.03	17.07	16.94	16.96	17.68	18.59	19.52	22.17	22.82	18.36
1905.....	15.95	15.84	15.98	15.68	15.63	15.04	14.37	14.64	14.94	15.61	17.01	17.10	15.65
1904.....	13.47	13.17	13.43	13.65	13.19	12.66	11.84	12.07	12.07	12.67	14.37	15.77	13.20
1903.....	22.06	21.47	21.54	20.93	19.54	18.83	17.79	16.98	16.03	15.02	14.23	13.75	18.18
1902.....	15.82	16.14	16.93	18.27	19.96	20.91	21.25	21.70	22.27	22.35	22.54	22.33	20.04

Average of the Iron Age quotations on foundry and basic pig irons; basic iron at Valley furnace; foundry iron an average of Chicago, Birmingham and Philadelphia

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(e) Car Loadings

Unit: 1,000—Average Loadings Per Week

	Grain and Grain Products	Live Stock	Coal and Coke	Forest Products	Ore	Mdse. L. C. L., and Misc.	Total
1917—							
January	....	....	.....	....	....	.....	.....
February	....	....	.....	....	....	.....	.....
March	....	....	.....	....	....	.....	.....
April	....	....	.....	....	....	.....	.....
May	....	....	.....	....	....	.....	.....
June	....	....	.....	....	....	.....	.....
July	....	....	.....	....	....	.....	.....
August	....	....	.....	....	....	.....	.....
September	....	....	.....	....	....	.....	.....
October	....	....	.....	....	....	.....	.....
November	....	....	.....	....	....	.....	930.9
December	....	....	.....	....	....	.....	761.2
Average	....	....	.....	....	....	.....	.....
1918—							
January	....	....	.....	....	....	.....	652.3
February	....	....	.....	....	....	.....	753.1
March	....	....	.....	....	....	.....	848.7
April	....	....	.....	....	....	.....	851.7
May	....	....	.....	....	....	.....	897.2
June	....	....	.....	....	....	.....	984.6
July	....	....	.....	....	....	.....	934.8
August	....	....	.....	....	....	.....	962.3
September	....	....	.....	....	....	.....	950.8
October	....	....	.....	....	....	.....	934.3
November	....	....	.....	....	....	.....	819.3
December	....	....	.....	....	....	.....	751.0
Average	....	....	.....	....	....	.....	867.0
1919—							
January	....	38.4	179.1	51.1	14.2	405.8	728.0
February	....	33.4	142.6	56.7	16.3	406.3	686.8
March	....	29.1	139.6	55.9	15.0	421.9	697.4
April	....	29.4	145.2	53.9	21.3	427.2	714.7
May	....	29.1	163.9	55.5	45.7	430.8	758.6
June	....	27.6	175.3	61.1	64.5	450.1	809.4
July	....	27.9	185.6	57.8	70.4	470.4	858.0
August	....	29.9	192.9	63.0	42.2	512.7	892.3
September	....	35.2	212.5	63.1	65.4	536.8	960.0
October	....	41.3	232.3	59.2	48.9	542.6	966.7
November	....	40.7	125.8	57.0	27.7	515.8	807.2
December	....	34.8	169.7	51.4	11.6	453.3	757.7
Average	....	33.1	172.0	57.1	36.9	464.5	803.1

	Grain and Grain Products	Live Stock	Coal and Coke	Forest Products	Ore	Mdse. L. C. L., and Misc.	Total
1920—							
January	39.4	36.7	209.1	58.6	10.9	465.8	819.8
February	31.6	29.2	189.8	60.0	12.8	448.9	776.2
March	35.8	28.8	194.8	64.6	15.9	511.0	847.9
April	37.6	26.2	168.0	61.0	19.5	429.0	730.5
May	33.6	30.5	180.5	63.3	56.7	500.0	861.6
June	30.8	27.8	198.8	59.6	72.6	503.8	859.9
July	42.7	25.2	206.7	55.5	75.1	503.6	901.0
August	49.0	27.5	221.9	64.1	78.2	534.8	967.6
September	46.9	31.7	215.9	61.5	80.4	535.8	968.7
October	42.4	33.9	250.0	60.0	74.2	556.2	1,005.1
November	40.1	34.4	231.6	63.5	42.5	486.5	883.7
December	37.0	26.8	213.1	41.5	12.4	396.7	722.8
Average	38.9	29.9	205.9	58.6	45.9	489.3	865.1
1921—							
January	38.8	33.6	186.9	47.8	9.0	384.9	704.8
February	35.4	28.4	158.2	53.4	8.9	397.5	683.1
March	32.9	26.1	133.6	50.2	6.4	439.4	692.2
April	26.9	27.8	141.4	47.7	5.8	449.7	706.0
May	31.1	26.7	162.5	49.5	23.7	456.3	756.8
June	33.3	27.0	160.1	49.4	29.3	458.8	765.2
July	34.8	24.0	149.3	41.6	30.3	448.9	750.7
August	41.2	27.7	159.7	45.0	31.9	485.9	809.9
September	43.4	29.8	167.6	46.4	28.7	512.9	841.4
October	39.8	37.0	204.5	52.6	21.7	562.8	929.2
November	35.2	31.5	163.8	49.0	8.3	471.3	760.8
December	32.2	29.1	137.0	44.8	5.5	424.5	682.9
Average	35.4	29.0	160.4	48.1	17.5	457.7	756.9
1922—							
January	48.5	31.6	167.6	46.8	4.3	403.5	702.2
February	51.5	29.1	196.7	50.3	4.1	432.9	764.6
March	41.5	27.4	205.2	52.4	5.2	494.0	825.8
April	32.8	27.2	75.9	56.1	9.8	521.5	723.3
May	42.7	29.8	90.8	60.9	16.7	545.8	786.7
June	39.5	29.0	102.3	62.2	52.2	557.0	842.4
July	50.2	26.7	84.3	54.9	63.4	545.6	825.0
August	56.1	29.7	109.6	57.8	66.0	557.2	876.5
September	51.1	35.3	180.9	56.7	51.6	559.4	935.1
October	52.2	40.4	205.8	59.6	46.8	587.7	992.5
November	52.8	38.6	207.7	61.6	29.0	554.2	943.7
December	50.8	33.6	201.3	56.7	9.4	486.5	838.4
Average	47.5	31.5	152.4	56.3	28.9	520.4	838.0

Car Loadings—Continued

	Grain and Grain Products	Live Stock	Coal and Coke	Forest Products	Ore	Mdse. L. C. L., and Misc.	Total
1923—							
January	47.9	34.6	207.3	66.5	10.9	478.0	845.1
February	40.8	32.2	199.8	65.9	10.4	492.7	841.7
March	41.4	31.3	201.7	75.1	13.1	554.1	916.6
April	38.4	31.6	192.5	77.2	19.4	581.9	941.0
May	33.6	31.1	194.2	75.4	61.6	578.7	974.7
June	34.8	30.3	201.5	77.9	79.6	587.2	1,011.3
July	42.7	30.5	199.2	69.9	82.7	561.0	986.1
August	52.2	34.2	206.8	76.4	80.4	590.8	1,040.9
September	50.3	39.7	190.5	72.5	73.3	610.5	1,036.8
October	49.6	43.7	205.2	73.8	61.4	643.9	1,077.7
November	48.5	40.1	187.3	72.4	35.7	593.9	977.8
December	45.5	35.9	172.4	58.6	10.4	503.7	826.5
Average	43.8	34.6	196.5	71.8	44.9	564.7	956.4
1924—							
January	45.2	32.9	202.0	79.7	9.5	535.2	908.1
February	48.8	30.6	177.5	81.2	11.7	573.8	915.7
March	40.8	29.3	134.7	76.2	17.6	580.0	874.8
April	37.0	30.9	140.6	72.8	51.1	560.2	894.9
May	39.2	35.6	207.7	67.0	8.5	494.4	858.4
June	38.0	30.0	149.2	68.3	59.4	561.4	906.4
July	46.2	28.9	145.9	61.1	55.1	557.3	894.4
August	62.1	31.5	162.8	68.8	50.3	599.0	974.4
September	67.4	36.8	187.0	67.1	47.1	631.2	1,036.6
October	67.7	41.1	200.1	70.5	42.5	668.8	1,090.7
November	54.8	39.8	192.1	69.0	17.9	601.2	974.7
December	45.6	36.5	188.7	60.1	9.5	507.0	847.5
Average	49.4	33.7	174.0	70.2	31.7	572.5	931.4
1925—							
January	51.0	36.4	218.2	73.2	10.1	532.4	921.3
February	42.2	30.8	183.0	79.9	11.3	557.8	904.8
March	37.5	27.8	160.6	81.2	11.8	604.7	923.7
April	33.4	28.1	151.1	78.3	30.0	619.8	940.7
May	36.8	26.5	161.9	75.1	62.8	605.2	968.3
June	36.3	26.5	164.8	73.7	63.1	624.7	989.0
July	43.1	26.6	174.0	65.9	62.9	613.6	986.2
August	54.9	30.3	208.3	71.7	62.8	652.3	1,080.2
September	52.4	32.8	182.8	69.7	57.6	679.0	1,074.4
October	46.4	42.3	199.2	70.3	49.7	699.5	1,107.5
November	48.7	35.1	199.8	66.4	33.1	640.8	1,023.7
December	48.7	32.0	186.6	60.3	11.2	549.2	888.0
Average	44.3	31.3	182.5	72.1	38.9	614.9	984.0
1926—							
January	47.1	33.4	205.5	67.1	10.2	559.3	922.7
February	42.8	28.3	192.5	74.7	10.5	570.4	919.1
March	39.8	28.4	195.9	76.7	10.9	617.5	969.3
April	37.6	27.2	176.6	75.5	15.2	626.3	958.3
May	40.0	27.7	180.1	76.5	55.2	657.0	1,036.8
June	40.2	26.9	183.6	74.0	67.9	635.5	1,028.0
July	55.9	26.9	187.7	67.0	73.0	638.6	1,049.1
August	57.0	29.3	202.4	70.6	77.6	667.5	1,104.4
September	50.4	37.2	216.2	70.7	74.5	698.7	1,147.6
October	54.2	40.5	240.8	72.3	66.7	730.6	1,205.1
November	45.1	34.6	247.8	65.8	31.8	642.9	1,067.9
December	44.1	29.1	226.0	54.4	9.6	540.7	904.1
Average	46.2	30.8	204.6	70.4	42.0	585.5	1,026.0

VIII. BRADSTREET'S COMMODITY PRICE INDEX

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Avg
1926.....	14.01	13.72	13.40	13.11	12.86	12.76	12.74	12.64	12.70	12.79	12.74	12.78	13.02
1925.....	13.93	13.89	13.84	13.69	13.32	13.62	13.85	14.24	14.09	14.15	14.32	14.41	13.95
1924.....	13.27	13.20	12.90	12.66	12.56	12.29	12.23	12.62	12.81	13.00	13.35	13.53	12.86
1923.....	13.70	13.72	13.93	13.93	13.67	13.38	13.09	12.82	12.91	13.10	13.14	13.44	13.40
1922.....	11.37	11.42	11.60	11.53	11.70	11.90	12.02	12.07	12.08	12.50	13.35	13.78	12.12
1921.....	12.66	12.37	11.87	11.37	10.82	10.62	10.73	11.06	11.09	11.19	11.35	11.31	11.37
1920.....	20.36	20.87	20.80	20.71	20.73	19.88	19.35	18.83	17.97	16.91	15.68	13 63	18.81
1919.....	18.53	17.63	17.22	17.28	17.24	18.09	18.90	20.00	19.47	19.52	19.90	20.18	18.66
1918.....	17.94	18.05	18.05	18.44	18.89	18.98	19.16	19.09	19.03	18.99	18.89	19.02	18.71
1917.....	13.73	13.94	14.14	14.58	15.12	15.47	16.07	16.40	16.64	16.91	17.07	17.60	15.64
1916.....	10.92	11.14	11.38	11.76	11.75	11.69	11.53	11.44	11.78	12.04	12.80	13.66	11.82
1915.....	9.14	9.66	9.62	9.78	9.80	9.74	9.87	9.82	9.80	9.98	10.38	10.65	9.85
1914.....	8.89	8.86	8.83	8.76	8.62	8.62	8.66	8.71	9.76	9.24	8.86	9.04	8.90
1913.....	9.49	9.46	9.41	9.30	9.14	9.07	8.95	9.01	9.10	9.15	9.23	9.23	9.21
1912.....	8.95	8.96	8.90	9.10	9.27	9.10	9.11	9.16	9.22	9.45	9.48	9.55	9.19
1911.....	8.84	8.77	8.69	8.52	8.46	8.53	8.59	8 66	8.82	8.81	8.89	8.98	8.71
1910.....	9.23	9.07	9.11	9.20	9.04	8.91	8.92	8.82	8.95	8.93	8.88	8.78	8.99
1909.....	8.26	8.30	8.22	8.32	8.30	8.40	8.46	8.50	8.59	8.75	8.96	9.13	9.35
1908.....	8.29	8.13	7.99	8.07	7.96	7.72	7.82	7.93	7.91	8.01	8.07	8.21	8.01
1907.....	8.92	9.00	9.13	8.96	8.94	8.99	9.04	8.93	8.83	8.85	8.75	8.52	8.91
1906.....	8.33	8.24	8.23	8.30	8.31	8.32	8.28	8.34	8.45	8.56	8.75	8.90	8.42
1905.....	8.08	8.08	8.10	8.00	7.97	7.91	7.92	8.11	8.28	8.23	8.21	8.30	8.10
1904.....	7.99	8.10	8.09	7.97	7.94	7.79	7.63	7.76	7.78	7.92	8.00	8.06	7.84
1903.....	8.08	8.08	8.13	8.12	7.96	7.88	7.87	7.75	7.76	7.91	7.87	7.84	7.85
1902.....	7.66	7.69	7.76	7.78	7.88	7.87	7.84	7.88	7.93	7.99	8.09	8.14	7.88
1901.....	7.57	7.57	7.55	7.53	7.43	7.42	7.52	7.59	7.61	7.73	7.67	7.73	7.58
1900.....	8.02	8.23	8.22	8.13	7.99	7.81	7.72	7.73	7.66	7.75	7.65	7.70	7.88
1899.....	6.80	6.89	6.96	6.88	6.89	7.00	7.09	7.21	7.46	7.64	7.72	7.98	7.21
1898.....	6.58	.....	.....	6.43	.....	.....	6.58	.....	.....	6.70	.....	.....	6.57
1897.....	6.12	.....	.....	6.05	.....	.....	5.85	.....	.....	6.45	.....	.....	6.12
1896.....	6.31	.....	.....	5.87	.....	.....	5.70	.....	.....	5.77	.....	.....	5.91
1895.....	6.82	.....	.....	5.97	.....	.....	6.42	.....	.....	6.52	.....	.....	6.43
1894.....	6.94	.....	.....	6.67	.....	.....	6.58	.....	.....	6.56	.....	.....	6.69
1893.....	7.83	.....	.....	7.84	.....	.....	7.29	.....	.....	7.17	.....	.....	7.54
1892.....	8.14	.....	.....	7.98	.....	.....	7.38	.....	.....	7.61	.....	.....	7.78

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IX. COMPARATIVE PRICE MOVEMENT IN LEADING COUNTRIES OF THE WORLD

	South Africa (Union) Official	Australia Melbourne Official	Belgium Official	France Official	Italy "Bachi"	Bank of Japan	New Zealand Official	Netherlands Official	United Kingdom			Germany Official	Austria Official
									Board of Trade	"Statist"	"Economist"		
1913	100	100	(a) 100	100	100	100	100	100	100	100	100	100	(a) 100
1916	122.6	138.2	—	188.2	199.7	117.1	125.9	224	—	159.5	160.5	152	
1917	140.7	152.8	—	261.6	306.3	148.5	143.2	276	—	206.1	204.1	179	
1918	153.1	177.8	—	339.2	409.1	195.8	168.5	376	—	226.5	224.9	217	
1919	164.8	188.9	—	356.2	365.8	235.9	176.1	304	—	241.9	235.1	415	
1920	223.3	227.9	—	509.4	624.4	259.4	206.7	292	307.3	295.3	283.2	1,486	
1921	160.4	174.9	(b) 366	345.0	577.5	200.4	191.9	182	197.2	182.4	181.0	1,911	
1922	128.4	161.6	367	326.6	562.3	195.8	164.5	160	158.8	154.1	159.5	34,182	802,350
1923	126.6	178.7	497	418.9	574.6	199.1	157.9	151	158.9	151.8	162.1	(d)	(c) 124
1924	128.7	173.3	573	488.5	585.0	206.5	164.8	156	166.2	164.6	173.9	122.5	136
1925	127.6	169.5	558	549.8	689.8	201.7	160.9	155	159.7	159.5	166.5	130.4	136
1926	123.3	168.4	744	702.6	708.4	178.9	155.2	145	148.1	149.6	152.8	125.1	123

	Canada Official	China Shanghai	Denmark "Finanstidende"	Egypt Cairo Official	Spain Official	United States Bureau of Labor Statistics	Finland Official	British India Calcutta Official	Peru Official	Sweden Official	Switzerland "Lorenz"	Czechoslovakia Official
1913	100.0	100	(e) 100	(a) 100	100	100.0	100	(a) 100	100.0	100	(a) 100	(a) 100
1916	131.6	—	206	128	141	126.8	206	128	145.9	—	—	—
1917	178.5	—	284	176	166	177.2	332	145	175.8	—	—	
1918	199.0	—	292	211	207	194.3	585	178	212.5	—	—	
1919	209.2	—	340	231	204	206.4	733	196	219.8	—	—	
1920	243.5	152.0	341	316	221	226.2	1,183	201	238.1	359	—	
1921	171.8	150.2	178	173	190	146.9	1,263	178	204.6	222	191.2	
1022	152.0	145.5	181	146	176	148.8	1,219	176	189.8	173	167.5	1,334
1923	153.0	156.4	210	132	172	153.7	1,095	172	189.1	163	180.6	977
1924	155.2	153.9	234	143	183	149.7	1,100	173	191.9	162	174.6	997
1925	160.3	159.4	157	152	188	158.7	1,129	159	201.6	161	161.5	1,008
1926	156.2	164.1	141	131	181	151.1	1,088	148	203	149	147.4	954

(a) 1914. (b) Average of last five months of year only. (c) Since 1923 gold index. (d) Paper marks 16,619,873,719,210; since 1924 Reichsmark prices. (e) End of year.

(Monthly Bulletin of Statistics, League of Nations, Table X)

X. STOCK OF MONEY IN THE UNITED STATES

June 30, 1914 to 1926

Year ended June 30	Coin and Other Money in the United States	Coin and Other Money in Treasury as Assets[1]		Coin and Other Money in Reporting Banks[2]		Held by or for Federal Reserve Banks and Agents[3]		In General Circulation, Exclusive of Amounts Held by Reporting Banks and Federal Reserve Banks		
		Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Per Capita
		$		$		$		$		
	Millions	Millions		Millions		Millions		Millions		
1914	3,738.3	336.3	9.00	1,630.0	43.60	.....	.....	1,772.0	47.40	$17.89
1915	3,989.4	345.4	8.66	1,447.9	36.29	386.2	9.68	1,809.9	45.37	17.97
1916	4,482.9	298.2	6.65	1,472.2	32.84	592.7	13.22	2,119.8	47.29	20.69
1917	5,408.0	268.4	4.96	1,487.3	27.50	1,280.9	23.69	2,371.4	43.85	22.77
1918	6,741.0	360.3	5.34	882.7	13.10	2,018.4	29.94	3,479.6	51.62	32.87
1919	7,518.8	584.2	7.77	981.3	13.05	2,167.3	28.83	3,786.0	50.35	35.67
1920	7,894.5	489.7	6.20	1,047.3	13.27	2,021.3	25.60	4,336.2	54.93	40.47
1921	8,096.0	461.2	5.70	926.3	11.44	2,795.2	34.52	3,913.3	48.34	36.21
1922	8,177.5	402.5	4.92	814.0	9.95	3,401.0	41.59	3,560.0	43.54	32.44
1923	8,603.7	383.5	4.46	777.1	9.03	3,490.8	40.57	3,952.3	45.94	35.52
1924	8,746.5	356.6	4.08	900.8	10.30	3,635.1	41.56	3,854.0	44.06	34.20
1925	8,221.2	362.0	4.40	938.3	11.41	3,122.7	37.99	3,798.2	46.20	33.29
1926	8,373.0	350.1	4.18	975.2	11.65	3,188.2	38.08	3,859.5	46.09	33.38

[1] Public money in national-bank depositories to the credit of the Treasurer of the United States not included.

[2] Money in banks of island possessions not included.

[3] Includes gold reserve held by banks against issues and gold or other funds deposited by banks with agents to retire Federal reserve notes in circulation and own Federal reserve notes held by Federal reserve banks.

NOTE.—Population estimated at 105,869,000 in 1918, 106,136,000 in 1919, 107,155,000 in 1920, 108,087,000 in 1921, 109,743,000 in 1922, 111,268,000 in 1923, 112,686,000 in 1924, 114,104,000 in 1925, and 115,614,000 in 1926.

XI. MONETARY UNITS OF PRINCIPAL COUNTRIES OF THE WORLD

Country	Monetary standard	Monetary unit: Name	Monetary unit: United States equivalent
ASIA:			
British North Borneo	Gold	Dollar	$0.5678
Ceylon	do	Rupee	.3244
China	Silver	Dollar	
Cyprus Island	Gold	Pound	4.8665
Federated Malay States	do	Dollar	.5678
India, British	do	Rupee	.4867
Indo-China, French	Silver	Piaster	
Japan, including Taiwan	Gold	Yen	.4985
Netherlands East Indies	do	Guilder	.402
Palestine	do	Pound	4.9431
Persia	Silver	Kran	
Philippine Islands	Gold	Peso	.50
Sarawak	do	Dollar	.5678
Siam	do	Tical	.3709
Straits Settlements	do	Dollar	.5678
Syria	do	Pound	3.860
AFRICA:			
Abyssinia	Silver	Thalari	
Algeria	Gold	Franc	.193
Belgian Congo	do	do	.193
Egypt	do	Pound	4.9431
Eritrea	do	Lira	.193
Gambia	do	Pound	4.8665
Gold Coast	do	do	4.8665
Guinea, French	do	Franc	.193
Kenya Colony and Uganda	do	Shilling	.2433
Madagascar	do	Franc	.193
Morocco	do	do	.193
Nigeria	do	Pound	4.8665
Nyasaland	do	do	4.8665
Portuguese East Africa	do	Escudo	1.0805
Portuguese West Africa	do	do	1.0805
Reunion Islands	do	Franc	.193
Rhodesia, Northern	do	Pound	4.8665
Rhodesia, Southern	do	do	4.8665
Senegal	do	Franc	.193
Sierra Leone	do	Pound	4.8665
Somaliland—			
British	do	Rupee	.3244
French	do	Franc	.193
Italian	do	Rupee	.3244
Tanganyika	do	Shilling	.2433
Tunis	do	Franc	.193
Union of South Africa	do	Pound	4.8665
Zanzibar	do	Rupee	.3244
NORTH AMERICA:			
United States	do	Dollar	$1.00
Canada	do	do	1.00
Mexico	do	Peso	.4985
British Honduras	do	Dollar	1.00
Costa Rica	do	Colon	.25
Cuba	do	Peso	1.00
Dominican Republic	do	Dollar	1.00
Guatemala	do	Quetzal	1.00
Haiti	do	Gourde	.20
Honduras	Silver	Peso	
Newfoundland	Gold	Dollar	1.00
Nicaragua	do	Cordoba	1.00
Panama	do	Balboa	1.00
Salvador	do	Colon	.50
Virgin Islands	do	Dollar	.965
British West Indies—			
Barbados	Gold	Dollar	1.0138
Jamaica	do	Pound	4.8665
Trinidad	do	Dollar	1.0138
Dutch West Indies	do	Guilder	.402
French West Indies—			
Guadeloupe	do	Franc	.193
Martinique	do	do	.193
SOUTH AMERICA:			
Argentina	do	Peso	.9648
Bolivia	do	Boliviano	.3893
Brazil	do	Milreis	.5462
Chile	do	Peso	.1217
Colombia	do	do	.9733
Ecuador	do	Sucre	.4876
Guiana—			
British	do	Dollar	1.0139
Dutch	do	Guilder	.402
French	do	Franc	.193
Paraguay	do	Peso	.9648
Peru	do	Pound	4.8665
Uruguay	do	Peso	1.0342
Venezuela	do	Bolivar	.193
EUROPE:			
Austria	do	Schilling	.1407
Belgium	do	Franc	.193
Bulgaria	do	Leu	.193
Czechoslovakia		Krone	.2026
Danzig	do	Gulden	.195
Denmark	do	Krone	.268
Estonia	do	Mark	.00268
Finland	do	do	.0252
France	do	Franc	.193
Germany	do	Reichsmark	.2382
Great Britain and Irish Free State	do	Pound	4.8665
Greece	do	Drachma	.193
Hungary	do	Pengo	.1749
Iceland	do	do	.268
Italy	do	Lira	.193
Latvia	do	Lat	.193
Lithuania	do	Litas	.10
Malta	do	Pound	4.8665
Netherlands	do	Guilder	.402
Norway	do	Krone	.268
Poland	do	Zloty	.193
Portugal	do	Escudo	1.0805
Rumania	do	Leu	.193
Russia	do	Chervonetz	5.1455
Spain	do	Peseta	.193
Sweden	do	Krona	.268
Switzerland	do	Franc	.193
Turkey	do	Piaster	.044
Yugoslavia	do	Dinar	.193
OCEANIA:			
Australia	do	Pound	4.8665
New Zealand	do	do	4.8665
Fiji Islands	do	do	4.8665
Society Islands	do	Franc	.193

[Annual Report Director of the Mint, 1926, pp. 208-11.]

XII. WEIGHTS AND MEASURES

Avoirdupois Weight

27 11/32	grains	=1 dram
16	drams	=1 ounce
16	ounces	=1 pound
25	pounds	=1 quarter
100	"	=1 hundredweight
2,000	"	=1 ton

Troy Weight

24	grains	=1 pennyweight
20	pennyweight	=1 ounce
12	ounces	=1 pound
1	carat	=3.168 Troy grains

XIII. DATA ON BANKING, MONEY AND CREDIT

(a) English Money

4	farthings	= 1	penny
12	pence	= 1	shilling
20	shillings	= 1	pound or sovereign
21	shillings	= 1	guinea

The sovereign weighs 123.274 grains, .916 (or eleven-twelfths) fine, and consequently it contains 113.001 grains of fine gold. The shilling weighs 87.27 grains, and down to 1920 was .925 (thirty-seven-fortieths) fine, thus containing 80.727 grains of fine silver, but under the coinage act of 1920, the fineness was reduced to .500 (one-half). Bronze coins consist of a mixture of copper, tin, and zinc. The penny weighs 145.83 grains. The standard of value is gold. Silver is legal tender up to 40 shillings; bronze up to 12 d., but farthings only up to 6 d. Bank of England notes are legal tender in England and Wales, except at the Bank itself (3 and 4 Will. 4, cap. 98). The 1 £ and 10 s. Treasury Notes issued since the outbreak of the War are also legal tender. The note circulation at February 24, 1926, was: currency notes and certificates, 284,179,000 £; Bank of England notes, 141,138,000 £; total, 425,317,000 £. The amount of currency in June, 1914, was estimated at 128,000,000 £ in circulation, and 75,000,000 £ in banks; total, 203,000,000 £. In December, 1919, the amount was estimated at 393,000,000 £ in circulation, and 191,000,000 £ in banks; total, 584,000,000 £. The silver circulation at the end of 1920 was estimated at about 60,000,000 £—[The Statesman's Year-Book, 1926, p. 64, Macmillan & Co., Ltd., London, by permission.]

(b) France

Banking, Money and Credit

The Bank of France, founded in 1800, and placed under State control in 1806, has the monopoly (since 1848) of issuing bank notes. The present privileges of the Bank were last renewed on December 20, 1918, for a further 25 years, i.e., until December 31, 1945. The capital of the Bank is fixed at 182,500,000 francs.

The following are the principal banks:—The Crédit Foncier de France, founded in 1852, which lends money on mortgage; the Crédit Lyonnais, founded in 1863; the Société Générale, founded in 1864; the Comptoir-Nationale d'Escompte de Paris; Banque de Paris et des Pays Bas; and the Banque Nationale de Crédit.

The *Franc* of 100 *centimes* was in normal conditions of the value of 9½d. or 25.225 francs to the pound sterling.

Gold coins in common use are 20 and 10 franc pieces. The 20 franc gold piece weighs 6.4516 grammes .900 fine, or 5.80645 grammes of fine gold. Silver coins in common use are 5, 2, 1, and half franc pieces. The silver franc weighs 5 grammes .835 fine. There are also 25, 10, and 5 centime pieces in nickel and bronze perforated in the centre and consisting of

750 parts copper and 250 parts nickel, and weighing respectively 5, 4, and 2 grammes. These tokens are in place of the former bronze coins of 10, and 5 centimes, and the coins of pure nickel of 25 centimes which, though they have not altogether disappeared from circulation, are no longer minted. There are also aluminium coins of 2 francs, 1 franc and 50 centimes.

Since May 1920 no silver coins have been struck, while gold coins have not been issued since 1915, save only in 1921 when coins to the value of about 4 million francs were minted. The actual metal currency in circulation is composed of token coins in aluminium-bronze (2 franc, 1 franc and 50 centimes), bronze-nickel coins (25, 10 and 5 centimes), and the old bronze pieces (10 and 5 centimes) or pure nickel (25 centimes). Total value of token coins in circulation on December 31, 1924, was 784, 960, 932 francs.

There is a double standard of value, gold and silver, the ratio being theoretically 15½ to 1. Of silver coins, however, only 5-franc pieces are legal tender, and of these the free coinage has been suspended since 1879. —[The Statesman's Year-Book, 1926, pp. 864-66, Macmillan & Co., Ltd., London, by permission.]

(c) Germany

Banking, Money, and Credit

By the Currency Law of August 30, 1924, which came into operation on October 11, 1924, the currency was once more established on a gold basis, with the following gold coins as legal tender: 20 and 10 gold mark pieces. Provision was also made for silver coins of 1 to 5 marks, and for 1, 2, 5, 10 and 50 pfennige. The notes of the Reichsbank (10 marks and upwards) are likewise legal tender; they have a minimum gold cover of 40 per cent. of their face value. For the present the convertibility of these notes is suspended. Besides the Imperial Bank there are the four so-called 'private note banks' (1) Bayerische Notenbank, in Munich; (2) Sächsische Bank, in Dresden; (3) Württembergische Notenbank, in Stuttgart; and (4) Badische Bank, in Karlsruhe, which also have the right of issuing notes (50 marks and upwards), on the same terms as the Imperial Bank.

On October 16, 1923, a proposal was adopted for the setting up of a Renten Bank to issue notes (Renten mark) secured by first mortgages on gold marks on the entire German landed property, and by gold obligations with first priority on industry, trade and the banks.

Of the currency in circulation before August 30, 1924, the following remain: the gold and copper coins of the pre-war period, the new silver coins, and the Rentenpfennig coins. The Imperial Bank and the four other banks of issue are obliged by law to change all their previously issued notes into new Bank notes at the rate of 1 billion marks to 1 Imperial gold mark. The following coins have been withdrawn: the old nickel-aluminium, iron and zinc coins; and for practical purposes the *Reichskassenscheine* and the *Darlehnskassenscheine* have been withdrawn.

On September 30, 1925, there were in circulation Imperial Bank notes to the value of 2637.1 million marks; 'Private Bank' notes, 177.3 million marks; notes of the Renten Bank (all of which must be withdrawn by the Imperial Bank within 10 years), 1713.2 million marks; and coins 528.0 million marks; making a total of 5055.5 million marks.

The Renten Bank commenced operations on November 15, 1923; on September 30, 1925, its position showed that it had granted credits as follows: to the Central Government, 108.8 million marks; to the Private Note Banks, 45.2 million marks; for agricultural bills, 726.1 million marks. The Renten Bank had issued notes to the value of 1833.4 million marks, of which the Imperial Bank had 120.2 million marks, and the rest (1713.2 million marks) were in general circulation.

By a law of March 19, 1924, there was established the German Gold Discount Bank (Deutsche Gold-discontobank) for the purpose of providing foreign currencies for German business. The capital of the institution was 10 million marks, one half provided by the Imperial Bank (with the aid of English credits); the other half, from private sources. (For further history of these banks see Problem 589, Summary of the Dawes Plan.)

Money, Weights, and Measures

The *Mark*, of 100 *Pfennig*, is of the normal value of 11¾d., or 20.43 marks to the pound sterling.

The metric system of weights and measures is in force.—[The Statesman's Year-Book, 1926, pp. 1015-16, Macmillan & Co., Ltd., London, by permission.]

(d) Canada

Currency, Weights, and Measures

The denominations of money in the currency of Canada are dollars, cents and mills. The cent is one-hundredth part of a dollar, and the mill one tenth part of a cent. A five-cent nickel coin has been issued. The standard of fineness for gold coins is nine-tenths fine, and British and United States gold coins are legal tender. The privilege of issuing notes is restricted to the Dominion Government and the chartered banks. The legal equivalent of the British sovereign is 4.86⅔ dollars.

The Dominion Government issues Dominion notes, which are legal tender, in denominations of $1, $2, $5 and certain other larger denominations used chiefly in clearing-house transactions between banks. They may be issued in any amount. Prior to the war, the security behind Dominion notes consisted of 25 per cent. gold for the first fifty million dollars of such notes and dollar for dollar in gold for amounts in excess of fifty million. They were redeemable in gold. The war necessitated the suspension of redemption in gold, and by special legislation the Government was given power to issue Dominion notes to the banks upon the pledge of satisfactory securities and interest at not less than 5 per cent. per annum was charged the banks. At the same time bank notes were made legal tender, and an issue of twenty-six million dollars of Dominion notes without security as formerly prescribed by law, largely to implement railway guarantees, was legalised.

In 1924 coin was struck at the Ottawa Mint to the value of 153,333 dollars nickel, and 15,964 dollars bronze. No gold or silver was struck. Coin issued: bronze, 11,900 dollars; nickel, 74,500 dollars.—[The Statesman's Year-Book, 1926, pp. 295-6, Macmillan & Co., Ltd., London, by permission.]

(e) Italy

Money and Credit

State notes and bank notes in circulation in lire:—

(In millions of lire)

	1920	1921	1922	1923	1924
State notes	2,268	2,267	2,267	2,428	2,400
Bank notes	19,732	19,209	18,012	17,247	18,114

The total coinage from 1862 to the end of 1921 was: gold, 430,840,430 lire; silver, 694,028,777 lire; nickel, 105,161,438 lire; bronze, 101,376,617 lire; total, 1,331,407,262 lire, exclusive of recoinage.

There is no national bank in Italy. According to the law of August 10, 1893, there are only three banks of issue: the Banca d'Italia, the Banco di Napoli, and the Banco de Sicilia. (For more recent changes, see Problems 598 and 600.)

On June 30, 1918, there were 747 co-operative credit societies and popular banks, 1,904 rural banks, 221 ordinary credit companies, and 10 agrarian credit institutions, and (January, 1925) 12 credit foncier companies, of which 4 were in liquidation, with 1,192,651,980 lire of "cartelle fondiarie" in circulation, and with 1,237,511,578 lire of "mutui con ammortamento."

Deposits in the savings-banks on December 31, 1924, were as follows: Post Office savings banks, 9,911,579,599 lire; ordinary savings banks, 10,982,269,000 lire.

On June 30, 1923, the savings deposited with the co-operative credit and ordinary credit companies amounted to 7,321 millions lire, and *Monti di pieta,* 506 millions lire, and with *Casse rurali* 797 millions lire.

By a decree of April 29, 1923, life assurance business is carried on only by the National Insurance Institute and by other institutions, national and foreign, authorised by the Government. Branches of the National Institute of Insurance have been established in every Province of Italy, 2,386 branches in all.

The money, weights, and measures of Italy are the same as those of France, the names only being altered to the Italian form.

The *Lira* of 100 *Centesimi;* intrinsic value, 25.22½ to 1£ sterling.

The coin in circulation consists of gold 10-lire, 20-lire, 50-lire and 100-lire pieces; of silver 50 cents, 1-lira, 2-lire and 5-lire pieces; nickel 50 cent and 20 cent pieces, and bronze 5 and 10 cent pieces. Nickel coin is being substituted for bronze to a large amount. Bank notes of 25, 50, 100, 500, and 1,000 lire are in circulation; also small notes, issued by the State (biglietti di Stato) for 5 and 10 lire.—[The Statesman's Year-Book, 1926, pp. 1015-16, Macmillan & Co., Ltd., London, by permission.]

XIV. GOLD AND SILVER RESERVES OF THE WORLD

(000,000 omitted)

	South Africa		Germany Reichsbank		Argentina	Belgium Bank		Canada			Denmark Bank	
	Joint Stock and Reserve Bank Gold (£)	Reserve Bank For. Assets	Gold (Reichsmarks)	For. Assets	Conversion Office Gold (Pesos ora)	Gold (Francs)	For. Assets	Gov. Gold	—Chartered Banks— Gold (Dollars)	For. Assets	Gold (Kroner)	For. Assets
	(*a*)	(*b*)	(*c*)	(*d*)			(*f*)		(*h*)	(*i*)		
1913	7.1	...	1,170	68	243	249	167	115	46	87	73·	...
1919	7.3	...	1,090	...	399	266	...	119	92	...	227	...
1920	10.4	...	1,092	...	481	267	...	101	95	...	228	...
1921	10.6	...	995	...	481	267	...	84	90	...	228	...
1922	11.1	...	1,005	...	481	269	...	132	108	...	228	...
1923	11.3	...	467	...	475	270	...	117	67	...	210	...
1924	11.3	2.2	760	253	452	272	30	142	67	112	209	...
1925	9.1	6.3	1,208	403	452	274	30	138	88	209	209	90
1926	8.6	6.3	1,831	519	452	(*o*) 620	(*o*) 447	131	99	259	209	27

	Spain Bank			United States		Finland Bank		France Bank				British India Government	
	Gold	Silver (Pesetas)	For. Assets	Federal Reserve Banks Gold (Dollars)	Government Gold	Gold (Markka)	For. Assets	—Gold— At Home	Abroad (Francs)	Silver	For. Assets	Gold (Rupees)	Silver
			(*m*)				(*n*)				(*r*)		
1913	480	716	191	...	150	276	820	3,517	.....	640	...	382	236
1919	2,446	630	...	2,063	153	332	.....	3,600	1,978	268	...	397	437
1920	2,457	574	...	2,059	153	332	.....	3,552	1,948	266	...	239	611
1921	2,513	625	...	2,875	153	332	.....	3,576	1,948	280	...	243	740
1922	2,525	646	...	3,047	153	332	.....	3,671	1,864	289	...	223	866
1923	2,528	649	...	3,080	153	332	.....	3,676	1,864	297	...	223	866
1924	2,535	651	34	2,937	153	332	563	3,681	1,864	306	69	223	808
1925	2,537	652	29	2,701	154	332	1,272	3,684	1,864	321	65	223	833
1926	2,537	675	35	2,819	154	327	1,317	3,684	1,864	341	83	223	1,035

(*a*) Excluding deposits abroad. (*b*) Foreign bills and British government securities. (*c*) Part held abroad since March 1922. (*d*) Covers assets only; total exchange holdings Dec. 31, 1925, 1016 millions reichsmarks. (*f*) Cover assets in terms of gold francs. (*h*) Part held abroad; part deposited in Central Reserve with Treasury. (*i*) Foreign bank notes and net balance of foreign account. (*m*) Cover assets in terms of gold pesetas. (*n*) In terms of new markka. 1 old markka = 7.66 new markka. (*o*) Since October Belgas. Belga = 5 paper francs (*r*) Net balances abroad.

[Monthly Bulletin of Statistics, League of Nations, Table XII.]

XIV. Gold and Silver Reserves of the World—Continued

(000,000 omitted)

	Italy						Japan	Norway	Netherlands		Poland	
	Gold				Silver (s)	For. Assets	Bank Gold	Bank Gold	Nederlandsche Bank		Bank	
	At Home		Abroad		Bank	Bank	(Yen)	(Kroner)	Gold	For. Assets	Gold	For. Assets
	Bank	Treasury	Bank	Treasury					(Gulden)		(Zloty)	
				(Lire)								
							(t)			(v)	(x)	(w)
1913	1,376	117	...	...	116	...	224	44	151	14	...	...
1919	1,037	4	439	159	115	...	952	148	637	...	9	...
1920	1,059	2	419	159	115	...	1,247	147	636	...	15	...
1921	1,092	11	419	159	114	...	1,246	147	606	...	31	...
1922	1,126	11	419	159	116	...	1,064	147	582	...	51	...
1923	1,118	13	419	159	125	...	1,057	147	582	...	68	...
1924	1,131	14	419	159	124	147	1,059	147	505	112	103	254
1925	1,134	14	419	159	125	182	1,057	147	443	247	134	(-3)
1926	1,144	14	419	159	105	630	1,058	147	414	187	138	125

	United Kingdom Bank of England	Russia State Bank Issue Dept.		Sweden Bank		Switzerland Bank			Czecho-Slovakia National Bank	
	Gold (£'s)	Gold	For. Assets (Rubles)	Gold	For. Assets (Kroner)	Gold	Silver (Francs)	For. Assets	Gold	For. Assets (Koruna)
	(y)		(z)		(e)			(g)	(j)	(k)
1913	35.0	...	...	102	122	170	21	...	...	...
1919	91.3	...	...	281	...	517	74	...	...	...
1920	128.3	...	...	282	...	543	122	...	...	...
1921	128.4	...	...	275	...	550	108	...	...	...
1922	127.5	5	...	274	...	535	104	...	...	...
1923	128.1	88	...	272	...	537	91	...	...	...
1924	128.6	142	102	237	136	506	87	47	913	737
1925	144.6	182	51	230	202	467	89	26	916	1,199
1926	151.1	164	63	224	204	472	73	35	918	2,083

(e) Net balances abroad, bills and first rate government securities. (g) Only sight balances abroad; foreign bills (37 millions frs. Dec. 31, 1913 and 197 millions frs. Dec. 31, 1925) not shown separatelyin weekly returns. (j) Calculated at Kc 100 = $2.96 the legal basis of stabilization. (k) Balances abroad, bills and bank notes. (s) Since July, 1925, Bank has held some small silver coins for Treasury, not included here. (t) Part held abroad up to July 1922; excluding government gold with Bank. (v) Only foreign bill portfolio; balances abroad (Dec. 31, 1924: 29 millions gulden, Dec. 31, 1925: 36 million gulden) not shown separately in weekly returns. (w) Foreign assets in terms of gold zloty. (x) Part deposited abroad since Aug. 1925. (y) Treasury also held gold reserve £28.5 millions from 1915 to July 30, 1922, and £27 millions from July 30, 1925 to April 29, 1925, when transferred to Bank. (z) Cover assets (mainly foreign bank notes) additional reserves of State Bank in gold and foreign exchange not serving as cover for notes Jan. 1, 1925, 94 millions; 1926, 17 million rubles.

XV. RATES OF DISCOUNT OF LEADING CENTRAL BANKS OF THE WORLD

(Average per cent for year)

	South Africa (Union)	Germany	Austria	Belgium	Denmark	Spain	United States		Finland	France	Hungary
	(*a*)						(*b*)	(*c*)			
1913	6.50	5.87	5.95	5.88	5.75	4.50	....	....	5.95	4	....
1916	6.50	5	5	5	5	4.50	3.50	....	5.19	5	....
1917	6.50	5	5	5	5	4.50	3.51	....	5	5	....
1918	6.50	5	5	5	5	4.50	4.37	....	5	5	....
1919	6.50	5	5	4.42	5.75	4.50	4.50	....	6.10	5	....
1920	7.10	5	5	5.12	7	5	6.49	....	7.91	5.78	....
1921	7.50	5	5.92	5.17	6.33	6	5.96	....	9	5.75	6
1922	7.10	6.58	7.67	4.71	5.13	5.67	4.21	4.54	8.79	5.08	8
1923	6.	38.48	9	5.50	5.67	5.12	4.43	4.49	8.29	5.	13.64
1924	5.92	10.	11.57	5.50	7	5	3.63	4.14	9.18	6.02	14.06
1925	5.50	9.15	10.86	5.70	6.49	5	3.42	3.81	8.53	6.52	9.77
1926	5.50	6.74	7.50	7.06	5.24	5	3.84	3.99	7.50	6.58	6.65

	British India	Italy	Japan	Norway	Netherlands	Poland	United Kingdom	Sweden	Switzerland	Czecho-Slovakia
1913	5.92	5.5– 6	6.60	5.50	4.52	....	4.77	5.50	4.81	....
1916	6.41	5–5.50	6.60	5.06	4.50	....	5.47	5.24	4.50	....
1917	6.06	5–5.50	5.50	5.53	4.50	....	5.16	5.68	4.50	....
1918	5.54	5–5.50	5.80	6	4.50	....	5	6.93	4.75	....
1919	5.64	5	7.30	5.69	4.50	....	5.15	6.58	5.32	5
1920	6.35	6	8	6.50	4.50	6	6.71	6.93	5	6
1921	5.75	6	8	6.75	4.50	6.33	6.10	6.49	4.44	5.79
1922	5.92	5.75	8	5.46	4.25	7	3.70	4.83	3.39	5.29
1923	5.94	5.50	8	5.81	4.03	16.98 (*d*)	3.49	4.64	3.47	4.86
1924	6.68	5.50	8	6.95	4.98	11.41	4	5.50	4	5.95
1925	5.32	6.46	7.52	5.85	3.90	10.77	4.57	5.17	3.90	6.72
1926	4.83	7	7.12	5.38	3.50	11.01	5	4.50	3.50	5.93

(*a*) Until December 1922 "minimum advance rate" of commercial banks. (*b*) Rate of Federal Reserve Bank of New York on 60 to 90 days' commercial paper. (*c*) Average rate of twelve Federal Reserve banks. (*d*) Until December 1923, rate of discount for bills in marks including commission of 50%.

[Monthly Bulletin of Statistics, League of Nations, Table XV.]

XVI. NOTES IN CIRCULATION IN LEADING COUNTRIES OF THE WORLD

(000,000 omitted)

	Spain	United States		France	British India	Italy		Japan	Norway	Netherlands		Poland			United Kingdom	
	Bank Notes (Pesetas)	Bank Notes (Dollars)	State Notes (Dollars)	Bank Notes (Francs)	State Notes (Rupees)	Bank Notes (Lire)	State Notes	Bank Notes (Yen)	Bank Notes (Kroner)	Bank Notes (Gulden)	State Notes	Bank Notes (Marki)	Bank Notes (Zloty)	Token Notes and Coins (Zloty)	Bank of England Notes (£)	State Notes
1913	1,931	726	343	5,714	646 (c)	2,284	499	426	108	313	0	.....	...	...	(b)	(d)
1919	3,867	3,868	279	37,275	1,829	16,281	2,270	1,555	450	1,033	41	5,316	...	...	29.6	0
1920	4,326	4,264	266	37,902	1,614	19,732	2,268	1,439	483	1,072	51	49,362	...	...	87.3	356.2
1921	4,244	3,256	281	36,487	1,725	19,209	2,267	1,547	410	1,013	33	229,538	...	...	113.3	367.6
1922	4,137	3,117	288	36,359	1,742	18,012	2,267	1,558	385	1,012	32	793,437	...	...	107.1	325.6
1923	4,338	2,951	308	39,114	1,834	17,247	2,428	1,704	396	1,066	32	125,371,955	...	...	102.9	295.4
1924	4,535	2,555	297	40,885	1,792	18,114	2,400	1,662	391	935	23	3,314,000	551	151	105.7	299.1
1925	4,440	2,458	294	51,085	1,918	19,350	2,100	1,668	363	875	17	2,770,200	381	440	101.3	296.3
1926	4,339	2,458	298	52,907	1,812	18,340	1,793	1,377	337	817	13	.....	593	428	88.5	296.8
															84.5	296.5

	Russia		Switzerland	Czecho-Slovakia	South Africa	Germany			Austria	Belgium	Brazil		Canada		
	Bank Notes Rbl.	State Notes Gold Rbl.	Bank Notes (Francs)	Bank Notes (Koruna)	Bank Notes (£)	Reichsbank Notes (Reichsmark)	Darlehn-kassen-scheine (Mark)	Reuten Bank Notes (Reuten-mark)	Bank Notes (Schilling)	Bank Notes (Francs)	State Notes (Milreis)	Bank Notes	Notes		
													Bank (q)	—Dominion— Actual Circulation (Dollars)	Total
1913	...	(e) 1,700	314	(f) ...	(g) 2.3	2,593	149	(i) ...	...	1,067	(o) 897	...	96	(r) 20	131
1919	...	...	1,036	4,723	8.0	35,698	14,109	...	...	4,786	1,748	...	210	30	319
1920	...	...	1,024	11,289	9.1	68,805	12,349	...	30,646	6,260	1,848	...	210	32	312
1921	...	...	1,009	12,130	8.8	113,640	8,523	...	174,115	6,415	(p) 2,049	...	163	27	281
1922	4	...	976	10,064	8.3	1,280,095	13,663	...	4,080,177	(m) 6,876	2,233	...	157	27	257
1923	237	...	982	9,599	8.8	(h)	800	...	713	7,537	2,260	389	159	28	249
1924	411	229	914	8,810	9.1	1,944	...	1,835	839	7,873	2,248	727	149	28	262
1925	727	388	876	8,408	7.2	2,960	...	1,476	890	7,814	2,115	592	158	18	227
1926	812	427	874	8,203	6.6	3,736	...	1,164	947	(n) 1,789	1,977	592	159	31	210

(c) Gross issue without deduction of notes held by the Banking Department; active circulation Dec. 31, 1926, was 1,656 million rupees. (b) Until end 1925 gross circulation; since Jan. 1926 excluding amount held by Bank of Poland; comparable figure for Dec. 1925 was 434 millions Zloty. (a) Since 1919 excluding notes held on redemption account in respect of currency notes, end of Dec. 1925, £ 56,250,000. (d) Since 1922 includes notes called in but not yet cancelled. (e) At end of 1922 there were 2,138,710 milliards; of 1923, 178,509,900 milliards; of 1924, 241,000,000 milliards paper rubles in circulation. (f) Increase at end of 1920 chiefly due to conversion of 5 milliards crowns of Austro-Hungarian notes. (g) Circulation in the Union only; on 30 Sept. 1921 notes in circulation abroad amounted to £ 426,000. (h) 496,507,424,772,000. (i) Excluding notes held by Reichsbank. (k) Until end 1922 Kronen. (m) Since 1922 circulation extended to Luxemburg. (n) Since 1926 October, Belgas; 1 belga = 5 paper francs. (o) Including notes of Conversion Office which amounted at end of 1924 to 10 millions. (p) Since January 1921 including issue of rediscounting department of Bank of Brazil. (q) Net circulation outside chartered banks. (r) In hands of public; the difference between this column and total is held as reserve by the Chartered banks.

[Monthly Bulletin of Statistics, League of Nations, Table XIII.]

XVII. DISTRIBUTION OF EARNING ASSETS OF "BIG FIVE" ENGLISH BANKS

On December 31, 1925
(In millions of pounds sterling)

	Midland		Lloyds		Barclays		Westminster		National Provincial		Aggregate of 40 Other Banks[a]	
	Amount	Ratio to Working Capital	Amount	Ratio to Working Capital	Amount	Ratio to Working Capital	Amount	Ratio to Working Capital	Amount	Ratio to Working Capital	Amount	Ratio to Working Capital
1 Paid-up capital and reserves[b]	27	.....	26	.....	25	.....	20	.....	20	.....	74	.....
2 Deposits, etc.	349	.....	337	.....	306	.....	271	.....	253	.....	842[c]	.....
Total working capital (1 and 2)	376	.....	363	.....	331	.....	291	.....	273	.....	916	.....
3 Advances, etc.	197	52.4%	183	50.4%	153	46.2%	127	43.7%	134	49.1%		
4 Bills discounted[d]	42	11.2%	42	11.6%	32	9.7%	40	13.7%	36	13.2%	442	48.2%
5 Investments[e]	41	10.9%	60	16.5%	66	19.9%	50	17.2%	42	15.4%	282	30.8%
6 Money at call and short notice[d]	19	5.0%	21	5.8%	20	6.1%	28	9.6%	18	6.6%	52	5.7%
Total earning assets (3, 4, 5 and 6)	299	79.5%	306	84.3%	271	81.9%	245	84.2%	230	84.3%	776	84.7%
7 Cash in hand and at bank[f]	71	18.9%	52	14.3%	55	16.6%	42	14.4%	38	13.9%	125	13.6%
Total of 3, 4, 5, 6 and 7	370	98.4%	358	98.6%	326	98.5%	287	98.6%	268	98.2%	901	98.3%

[a] Figures of the latest annual balance sheet are included in cases where the financial year does not coincide with the calendar year. [b] Including profit balance and dividends payable. [c] Including notes in circulation. [d] Where separately shown. [e] Including shares in affiliated banks. [f] Including balances with and cheques in course of collection on other home banks. [g] Not including Bank of England.

[*The Statist*, British Banking Section, May 29, 1926, p. 867, by permission.]

XVIII. STATEMENTS OF BANK OF ENGLAND

LIABILITIES:

(In thousands of pounds sterling)

	Capital	Rest	Capital and Reserve		Notes in Circulation		Public Deposits		Other Deposits		Seven Day and Other Bills		Total Liabilities
	£	£	£	%	£	%	£	%	£	%	£	%	£
1914 End of Feb.	14,553	3,543	18,096	16.4	28,210	25.6	20,636	18.7	43,438	39.3	13	—	110,394
1914 (*a*)	14,553	3,446	17,999	17.4	29,317	28.4	13.735	13.3	42,185	49.0	14	—	105,252
1915	14,553	3,569	18,122	8.5	34,222	16.1	26,924	12.7	132,868	62.7	38	—	212,177
1916	14,533	3,514	18,067	9.1	32,507	16.3	52,619	26.3	96,393	48.3	23	—	199,613
1917	14,533	3,571	18,124	6.6	38,584	14.2	47,846	17.6	167,992	61.6	27	—	272,575
1918	14,533	3,563	18,116	7.8	47,251	20.3	42,649	18.3	124,767	53.6	10	—	232,794
1919	14,533	3,499	18,052	7.7	70,335	30.1	25,823	11.1	119,169	51.1	23	—	233,405
1920	14,533	3,509	18,062	5.9	96,526	31.7	17,322	5.7	172,824	56.7	17	—	304,752
1921	14,533	3,520	18,073	6.6	127,697	46.8	15,987	5.9	111,259	40.7	9	—	273,028
1922	14,533	3,527	18,080	6.6	121,545	43.8	27,808	10.0	109,947	39.6	14	—	277,395
1923	14,533	3,676	18,229	6.7	123,940	45.3	20,907	7.6	110,548	40.4	18	—	273,644
1924	14,533	3,593	18,146	6.8	125,579	47.0	13,106	4.9	110,436	41.3	7	—	267,275
1925	14,533	3,609	18,162	6.9	124,803	47.1	16,143	6.1	105,542	39.9	11	—	264,663
1926 (*b*)	14,533	3,606	18,159	6.5	141,138	50.1	16,065	5.7	106,176	37.7	3	—	218,542
	14,533	3,188	17,741	6.3	141,651	50.1	21,264	7.5	102,150	36.1	5	—	282,814

ASSETS:

	Government Dept		Other Securities Issue Dept		Government Securities Bkg. Dept.		"Other" Securities Bkg. Dept.		Gold Coin and Bullion Issue Dept.		Gold and Silver Coin Bkg. Dept.		Total Assets	Notes Issued	Total Gold and Silver Coin and Bullion	Total Reserve	Res. to Total Deposits
	£	%	£	%	£	%	£	%	£	%	£	%	£	£	£	£	%
1914 End of Feb.	11,015	10.0	7,434	6.7	11,252	10.2	37,986	34.4	41,336	37.4	1,368	1.3	110,394	59,786	42,705	32,944	51.42
1914	11,015	10.7	7,434	7.2	11,005	10.7	33,632	32.6	38,564	37.3	1,599	1.5	103,252	57,014	40,164	29,297	52.40
1915	11,015	5.2	7,434	3.5	26,924	12.7	102,931	48.5	63,329	29.4	1,541	.7	212,177	80,779	63,871	48,098	30.60
1916	11,015	5.5	7,434	3.7	32,839	16.5	93,336	46.7	54,216	27.2	771	.4	199,613	72,666	54,987	40,929	27.47
1917	11,015	4.0	7,434	2.7	82,445	30.2	117,383	43.1	52,717	19.4	1,578	.6	272,575	71,167	54,296	34,161	15.82
1918	11,015	4.7	7,434	3.2	56,350	24.2	98,641	42.4	58,287	25.0	1,065	.5	232,794	76,737	59,352	30,551	18.25
1919	11,015	4.7	7,434	3.2	50,196	21.5	83,130	25.7	80,450	34.4	1,178	.5	233,405	98,900	81,628	29,742	20.51
1920	11,015	3.6	7,434	2.4	85,152	28.0	90,704	29.8	109,713	36.0	731	.2	304,752	128,163	110,445	32,369	17.02
1921	11,015	4.0	7,434	2.7	31,030	11.4	95,220	34.9	126,510	46.3	1,817	.7	273,028	144,960	128,327	19,080	14.99
1922	11,015	4.0	7,434	2.7	48,545	17.5	81,638	29.4	126,929	45.7	1,831	.7	277,395	145,379	128,761	25,665	18.62
1923	11,015	4.0	8,734	3.2	47,282	17.3	79,107	28.9	125,675	45.9	1,828	.7	273,644	145,425	127,504	23,313	17.73
1924	11,015	4.1	8,734	3.3	51,197	19.2	68,221	25.5	126,272	47.2	1,833	.7	267,275	146,022	128,106	22,277	18.03
1925	11,015	4.2	8,734	3.3	41,926	15.8	74,399	28.1	126,761	47.9	1,826	.7	264,663	146,511	128,587	23,534	19.34
1926	11,015	3.9	8,734	3.1	38,242	13.6	79,056	28.1	143,186	50.8	1,307	.5	281,542	162,936	144,493	23,105	18.90
	11,015	3.9	8,734	3.1	46,130	16.3	68,671	24.3	147,009	52.0	1,252	.4	282,814	166,759	148,262	23,360	21.36

(*a*) July 22. (*b*) May 12.

[*The Statist*, British Banking Section, May 29, 1926, p. 884, by permission.]

XIX. BANK OF ENGLAND

ISSUE DEPARTMENT

(In thousands of pounds sterling)

	Notes Issued	Total	Govt. Debt	Other Securities	Gold Coin and Bullion	Total
	£	£	£	£	£	£
1914, May 13	52,513	52,513	11,015	7,434	34,063	52,513
1915, " 12	80,789	80,789	11,015	7,434	62,339	80,789
1916, " 10	76,631	76,631	11,015	7,434	58,181	76,631
1917, " 9	71,226	71,226	11,015	7,434	52,776	71,226
1918, " 15	79,574	79,574	11,015	7,434	61,125	59,574
1919, " 14	102,463	102,463	11,015	7,434	84,013	102,463
1920, " 12	130,442	130,442	11,015	7,434	111,992	130,442
1921, " 11	144,990	144,990	11,015	7,434	126,540	144,990
1922, " 10	145,505	145,505	11,015	7,434	127,055	145,505
1923, " 9	145,446	145,446	11,015	8,734	125,696	145,446
1924, " 7	146,095	146,095	11,015	8,734	126,345	146,095
1925, " 6	172,606	172,606	11,015	8,734	152,856	172,606
1926, " 12	166,759	166,759	11,015	8,734	147,009	166,759
1926 on 1925 Inc. or Dec.	5,846*	5,846*	.....	.....	5,846*	5,846*
1926 on 1914	114,245	114,245	.....	1,300	112,945	114,245

BANKING DEPARTMENT

	Proprietors' Capital	Rest	Deposits: Public	Deposits: Other	7 Day and Other Bills	Total	Securities: Government	Securities: Other	Notes	Gold and Silver Coin	Total
	£	£	£	£	£	£	£	£	£	£	£
1914, May 13	14,553	3,102	18,610	38,774	16	75,057	11,046	38,456	23,811	1,742	75,057
1915, " 12	14,553	3,115	127,864	95,614	44	241,191	51,043	143,072	45,786	1,289	241,191
1916, " 10	14,553	3,123	54,833	83,441	31	155,983	33,187	79,409	42,204	1,181	155,983
1917, " 9	14,553	3,135	54,172	119,375	37	191,274	45,049	111,479	32,502	2,242	191,274
1918, " 15	14,553	3,180	41,457	133,820	10	193,020	57,316	105,522	29,597	583	193,020
1919, " 14	14,553	3,105	22,807	111,478	9	151,954	46,433	77,984	25,976	1,560	151,954
1920, " 12	14,553	3,145	21,428	99,404	23	138,555	38,455	80,444	19,129	526	138,555
1921, " 11	14,553	3,148	14,860	113,560	10	146,133	49,186	78,903	16,221	1,823	146,133
1922, " 10	14,553	3,139	12,179	130,259	17	160,148	58,872	75,529	23,913	1,832	160,148
1923, " 9	14,553	3,154	14,602	102,003	17	134,330	42,221	68,613	21,669	1,825	134,330
1924, " 7	14,553	3,105	10,054	112,503	7	140,294	42,027	73,560	20,879	1,826	140,294
1925, " 6	14,553	3,195	11,021	107,716	3	136,490	37,609	72,735	24,318	1,827	136,490
1926, " 12	14,553	3,188	21,264	102,150	5	141,162	46,130	68,671	25,108	1,252	141,162
1926 on 1925 Inc or Dec.	.....	6*	10,242	5,565*	1	4,672	8,520	4,063*	789	574	4,672
1926 on 1914	.....	86	2,653	63,376	11*	66,105	35,083	30,214	1,297	490*	66,105

* Decrease. [*The Statist*, British Banking Section, May 29, 1926, p. 884, by permission.]

XX. BANKS OF GREAT BRITAIN AND IRELAND (INCLUDING BANK OF ENGLAND)

AGGREGATE LIABILITIES

(In thousands of pounds sterling)

Year	No. of Banks	Capital Paid Up and Reserve Funds				Notes in Circulation		Acceptances, etc.		Deposit and Current Accounts		Profit Balance		Total Liabilities
		Capital Paid Up	Reserves	Total	% of Total Liabs.	Amount	% of Total Liabs.	Amount	% of Total Liabs.	Amount	% of Total Liabs.	Amount	% of Total Liabs.	Amount
		£	£	£		£		£		£		£		£
1890	124	70,972	33,278	104,250	14.5	39,477	5.5	27,190	3.8	541,405	75.5	5,174	.7	717,496
1895	155	85,610	37,234	122,844	13.2	41,339	4.4	27,821	3.0	735,394	79.0	4,613	.4	932,011
1900	111	82,194	45,817	128,011	12.4	45,623	4.4	28,291	2.7	825,419	79.9	5,838	.6	1,033,182
1905	88	83,408	49,185	132,593	12.1	43,456	4.0	42,235	4.0	871,165	79.4	5,920	.5	1,095,369
1910	83	83,516	49,193	132,709	10.9	43,174	3.6	54,242	4.5	982,133	80.6	5,602	.4	1,217,860
1913	77	85,755	49,621	135,376	9.8	45,589	3.3	63,458	4.6	1,142,038	81.9	6,346	.4	1,392,807
1914	70	85,184	49,209	134,393	8.6	56,848	3.6	50,770	3.2	1,322,267	84.2	6,829	.4	1,571,107
1918	54	88,449	59,405	147,854	5.6	126,514	4.8	65,079	2.5	2,274,729	86.8	7,098	.3	2,621,274
1919	49	91,708	67,398	159,106	5.2	148,762	4.8	161,095	5.2	2,598,695	84.5	8,432	.3	3,076,090
1920	48	107,397	74,334	181,731	5.6	187,106	5.8	112,453	3.5	2,739,155	84.8	9,257	.3	3,229,702
1921	47	108,042	75,154	183,196	5.8	170,981	5.4	81,239	2.6	2,699,068	85.9	9,475	.3	3,143,959
1922	54	109,649	77,140	186,789	6.2	165,739	5.5	94,677	3.2	2,553,147	84.8	9,717	.3	3,010,069
1923	47	107,921	78,491	186,412	6.3	167,168	5.6	118,688	4.0	2,486,153	83.8	10,081	.3	2,968,502
1924	45	111,267	82,955	194,222	6.4	166,830	5.5	142,690	4.7	2,510,291	83.0	10,378	.4	3,024,411
1925	46	112,416	86,821	199,237	6.6	181,773	6.0	136,945	4.5	2,490,054	82.5	10,873	.4	3,018,881

AGGREGATE ASSETS

Year	No. of Banks	Cash in Hand and Money at Call and at Short Notice						Investments		Bills Discounted and Advances				Liab. of Cus. for Accept., etc.		Bank Premises, etc.		Total Assets
		Cash in Hd. & at Bk. of Eng.		Money at Call & at Short Notice		Total				Bills Disc.	Advances	Total						
		£	%*	£	%*	£	%*	£	%*	£	£		%*	£	%*	£	%*	£
1890	124	97,248	16.8	44,986	7.7	142,234	24.5	155,576	26.8	52,382	327,906	380,288	65.4	27,190	4.7	12,208	2.1	717,496
1895	155	152,318	19.6	59,125	7.6	211,443	27.2	213,332	27.5	53,134	407,491	460,625	59.3	27,821	3.6	18,790	2.4	932,011
1900	111	151,101	17.4	69,143	7.9	220,244	25.3	227,425	26.1	51,666	485,375	537,041	61.7	28,291	3.2	20,185	2.3	1,033,186
1905	88	157,163	17.2	97,275	10.6	254,438	27.8	220,456	24.1	59,164	495,075	554,239	60.6	42,235	4.6	24,001	2.6	1,095,369
1910	83	173,072	16.9	106,330	10.4	279,402	27.3	242,245	23.6	83,924	532,956	616,880	60.2	54,242	5.3	25,091	2.4	1,217,860
1913	77	208,168	17.5	124,755	10.5	332,923	28.0	242,583	20.4	121,908	604,406	726,314	61.2	63,458	5.3	27,529	2.3	1,392,807
1914	70	398,191	22.4	105,137	7.6	413,328	30.0	274,999	19.9	117,513	686,582	804,095	58.3	50,770	3.7	27,915	2.0	1,571,107
1918	54	486,880	20.3	222,751	9.3	709,631	29.6	653,334	27.2	421,263	744,079	1,165,342	48.5	65,079	2.7	27,888	1.2	2,621,274
1919	49	534,880	19.4	150,595	5.5	685,475	24.9	710,954	25.9	364,722	1,125,253	1,489,975	54.2	161,095	5.9	28,591	1.0	3,076,090
1920	48	569,011	19.5	153,098	5.2	722,109	24.7	678,986	23.2	415,872	1,268,844	1,684,716	57.6	112,453	3.8	31,438	1.1	3,229,702
1921	47	548,745	19.1	151,909	5.3	700,654	24.4	642,656	22.4	541,695	1,143,222	1,684,917	58.7	81,239	2.8	34,493	1.2	3,143,959
1922	54	517,141	19.0	150,201	5.5	667,342	24.5	758,504	27.9	369,448	1,083,192	1,452,640	53.4	94,677	3.5	36,906	1.4	3,010,069
1923	47	510,216	19.2	143,319	5.4	653,535	24.6	708,319	26.7	331,000	1,119,779	1,450,779	54.7	118,688	4.5	37,181	1.4	2,968,502
1924	45	518,922	19.4	149,525	5.6	668,447	25.0	688,530	25.7	281,864	1,203,901	1,485,765	55.5	142,421	5.3	39,248	1.5	3,024,411
1925	46	527,571	19.7	157,541	5.9	685,112	25.6	625,129	23.4	271,129	1,260,060	1,531,189	57.3	136,945	5.1	40,506	1.5	3,018,881

* These percentages represent the relation of the individual items to deposit and note liabilities combined. [*The Statist*, British Banking Section, May 29, 1926, p. 873, by permission.]

XXI. ENGLISH DISCOUNT COMPANIES, 1925

LIABILITIES:

(In thousands of pounds sterling)

	Date of Balance Sheet 1925	Paid up Capital	Reserve Fund	Paid up Capital and Reserve		Loans, Deposits, etc.		Bills Rediscounted		Rebate of Bills Discounted		Profit Balance		Total Liabilities (and Assets)
				Amount	%*	Amount	%*	Amount	%*	Amount	%*	Amount	%*	
		£	£	£		£		£		£		£		£
Alexanders Discount Co.	Dec. 31	600	460	1,060	4.5	17,525	74.0	4,812	20.3	200	0.8	98	0.4	23,696
Baker, Duncombe & Co.	Mar. 31	200	50	250	3.3	7,303	96.7	[c]	...	[c]	...	...	...	7,553
Gillett Bros. Disc Co.	Jan. 31[f]	100	80	180	1.8	10,055	98.2	[c]	...	[c]	...	...	...	10,235
National Discount Co.	Dec. 31	1,000	800	1,800	3.5	28,681	55.4	20,339	39.3	611	1.2	305	0.6	51,737
Union Discount Co. of London	Dec. 31	1,125	1,475	2,600	4.9	40,994	76.6	8,840	16.5	688	1.3	356	0.7	53,479
Total liabilities		3,025	2,865	5,890	4.0	104,560	71.3	33,992	23.2	1,499	1.0	760	0.5	146,703

ASSETS AND PROFITS:

	Cash in Hand and at Bankers		Investments		Bills Discounted, etc.		Loans, etc.		Other Assets		Net Profits of Year†	% of Paid-Up Capital	Dividends Paid†		Special Appropriation	Carried Forward
													Amount	Rate		
	£	%*	£	%*	£	%*	£	%*	£	%*	£	%	£	%†	£	£
Alexanders Discount Co.	502	2.1	2,726	11.5	20,169	85.1	298	1.3	...	...	89	14.9	89§	14.9	...	33
Baker Duncombe & Co.	109	1.5	959	12.7	6,477	85.7	7	0.1	...	...	[a]	...	[a]	...	[a]	[a]
Gillett Bros Discount Co	55	0.5	295	2.9	9,475	92.6	410	4.0	...	...	[a]	...	[a]	...	[a]	[a]
National Discount Co.	624	1.2	1,912	3.7	44,848	86.7	4,234	8.2	118	0.2	147	14.8[d]	139‡	13.9[d]	...	223
Union Discount Co. of London	1,303	2.4	5,868	11.0	45,464	85.0	695	1.3	146	.3	221	19.7	190/	16.9	...	232
Total Assets, profits, etc.	2,595	1.8	11,761	8.0	126,435	86.2	5,646	3.8	265	.2	458[b]	16.8[e]	418[b]	15.4[e]	...	486

* Per cent of Total Liabilities or Assets. † After deduction for income tax. ‡ Includes bonus of 1s.6 d. per share, less tax, on "B" shares. § Includes 6% on £100,000. Preference share capital and 15% on Ordinary, with equivalent of a tax-free bonus on Ordinary of 5s. per share. / Includes equivalent of a tax-free bonus of 5s per share.

[a] No profit and loss account rendered. [b] Profits, etc. of three companies only. [c] Included with deposit and loan liabilities. [d] Calculated on increased capital of £1,000,000. [e] See Note [d]. [f] 1926.

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XXII. BARCLAYS BANK, LIMITED

LIABILITIES:

(In thousands of pounds sterling)

	Capital Paid-up	Reserve Fund	Paid-up Capital and Reserve		Acceptances, etc		Deposits, etc		Profit Balance		Total Liabilities
			£	%*	£	%*	£	%*	£	%*	£
1914, June 30	3,600	1,600	5,200	7.7	322	.5	61,740	91.6	140	0.2	67,403
1915, Dec 31	3,600	1,600	5,200	6.4	2,229	2.8	73,269	90.7	72	.1	80,771
1916, " 31	4,594	2,200	6,794	5.8	2,861	2.5	107,169	91.6	120	.1	116,946
1917, " 31	4,594	2,200	6,794	4.9	2,151	1.6	128,881	93.4	186	.1	138,013
1918, " 31	8,160	6,000	14,160	5.5	4,211	1.6	239,381	92.8	278	.1	258,032
1919, " 31	8,820	7,000	15,820	4.9	13,588	4.2	295,550	90.8	508	.1	325,468
1920, " 31	15,592	8,250	23,842	6.6	10,227	2.8	327,222	90.4	565	.2	361,858
1921, " 31	15,592	8,250	23,842	6.6	6,239	1.7	330,407	91.5	535	.2	361,023
1922, " 31	15,592	8,250	23,842	7.2	5,458	1.6	302,685	91.0	500	.2	332,486
1923, " 31	15,592	8,250	23,842	7.2	7,677	2.3	301,031	90.4	518	.1	333,069
1924, " 31	15,592	8,250	23,842	7.1	11,308	3.4	300,506	89.4	520	.1	336,177
1925, " 31	15,592	9,250‡	24,842	7.1	17,175	4.9	305,723	87.8	536	.2	348,278

ASSETS:

	Cash in Hand, Bank of England, etc.		Money at Call, etc.		Investments		Bills Discounted		Advances		Custrs.' Liab. for Acceptances		Bank Premises		Total Assets
	£	%*	£	%*	£	%*	£	%*	£	%*	£	%*	£	%*	£
1914, June 30	9,029	13.4	6,779	10.0	13,098	19.5	8,636	12.8	27,762	41.2	322	0.5	1,774	2.6	67,403
1915, Dec 31	14,181	17.6	4,470	5.5	25,908	32.1	3,721	4.6	28,408	35.2	2,229	2.8	1,852	2.2	80,771
1916, " 31	23,983	20.5	5,526	4.7	27,041	23.1	16,880	14.4	38,203	32.7	2,861	2.5	2,450	2.1	116,946
1917, " 31	28,778	20.9	5,920	4.2	26,266	19.0	28,089	20.4	44,201	32.0	2,151	1.6	6,606	1.9	138,013
1918, " 31	51,819	20.1	21,325	8.2	50,559	19.6	47,442	18.4	78,854	30.6	4,211	1.6	3,818	1.5	258,032
1919, " 31	65,174	20.0	20,031	6.2	62,341	19.1	30,253	9.3	130,095	40.0	13,588	4.2	3,983	1.2	325,468
1920, " 31	61,710	17.0	21,313	5.9	63,936	17.7	40,860	12.4	155,560	43.0	10,227	2.8	4,248	1.2	361,858
1921, " 31	58,283	16.1	20,041	5.6	63,668	17.6	74,839	20.7	133,350	36.9	6,239	1.7	4,600	1.4	361,023
1922, " 31	53,611	16.1	19,950	6.0	78,606	23.7	43,568	13.1	126,374	38.0	5,458	1.6	4,916	1.5	332,486
1923, " 31	52,773	15.9	18,654	5.6	77,661	23.3	38,623	11.6	132,520	39.8	7,677	2.3	5,159	1.5	333,069
1924, " 31	55,840	16.6	20,347	6.0	70,261	20.9	33,248	9.9	140,078	41.7	11,308	3.4	5,092	1.5	336,177
1925, " 31	55,490	15.9	18,964	5.7	65,639	18.9	32,028	9.2	153,028	43.9	17,175	4.9	5,050	1.5	348,278

* Per cent of Total Liabilities or Assets ‡ £1,000,000 added from realized profits on investments

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XXIII. ALEXANDERS DISCOUNT COMPANY, LIMITED

LIABILITIES:

(In thousands of pounds sterling)

Dec. 31	Capital Paid-up	Reserve Fund	Total Capital and Reserve		Deposits and Loans, etc.		Bills Rediscounted		Rebate on Bills Discounted		Profit Balance		Total Liabilities
	£	£	£	%*	£	%*	£	%*	£	%*	£	%*	£
1913	500	100	600	4.8	10,134	82.1	1,497	12.1	86	0.7	35	0.3	12,353
1914	500	120	620	5.9	9,427	90.2	281	2.7	76	.8	38	.4	10,444
1916	500	140	640	5.0	10,978	85.0	1,145	8.8	118	.9	41	.3	12,923
1917	500	170	670	4.5	12,668	85.2	1,348	9.1	128	.8	54	.4	14,869
1918	500	200	700	4.2	13,826	83.2	1,912	11.5	124	.7	56	.4	16,619
1919	500	215	715	3.9	15,991	87.8	1,327	7.3	130	.7	56	.3	18,220
1920	550	270	820	4.0	17,196	83.8	2,255	11.0	175	.9	72	.3	20,520
1921	550	320	870	3.8	18,931	83.8	2,523	11.2	195	.9	75	.3	22,596
1922	600	400	1,000	4.8	17,756	85.6	1,692	8.2	191	.9	97	.5	20,739
1923	600	430	1,030	4.7	18,393	83.3	2,368	10.7	193	.9	97	.4	22,084
1924	600	460	1,060	4.6	17,862	76.7	4,076	17.5	196	.8	98	.4	23,293
1925	600	460	1,060	4.5	17,525	74.0	4,812	20.3	200	.8	98	.4	23,696

ASSETS:

Dec. 31	Cash at Bankers		Investments		Bills Discounted		Advances		Total Assets
	£	%*	£	%*	£	%*	£	%*	£
1913	293	2.4	944	7.6	10,798	87.4	316	2.6	12,353
1914	350	3.4	1,341	12.8	8,684	83.1	68	.7	10,444
1916	389	3.0	1,673	13.0	10,856	84.0	3	...	12,923
1917	409	2.7	1,790	12.0	12,616	84.9	52	.4	14,869
1918	420	2.6	2,235	13.4	13,798	83.0	165	1.0	16,619
1919	423	2.3	1,347	7.4	16,346	89.7	102	.6	18,220
1920	448	2.2	1,818	8.9	18,063	88.0	190	.9	20,520
1921	477	2.1	2,511	11.1	18,955	83.9	651	2.9	22,596
1922	471	2.3	2,553	12.3	17,412	84.0	302	1.4	20,739
1923	492	2.2	3,063	13.9	17,733	80.3	794	3.6	22,084
1924	504	2.2	2,900	12.4	19,473	83.6	414	1.8	23,293
1925	502	2.1	2,726	11.5	20,169	85.1	298	1.3	23,696

* Per cent of Total Liabilities or Assets.

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XXIV. 46 BANKS OF GREAT BRITAIN AND IRELAND[1]

LIABILITIES:

	Date of Balance Sheet 1925	No. of Offices	Paid up Capital	Reserve	Paid up Capital and Reserve		Notes in Circulation		Acceptances, Etc.		Deposit and Current Accounts		Profit Balance		Total Liabilities
			£	£	£	%*	£	%*	£	%*	£	%*	£	%*	£
Bank of England	Dec. 30	11	14,553	3,000	17,553	5.3	144,730	43.6	...	...	169,046	51.0	344	0.1	331,674
Bank of Ireland	Dec. 31	129	2,769	2,769	5,538	11.2	6,031	12.2	...	...	37,630	76.0	292	.6	49,493
Bank of Liverpool and Martins	Dec. 31	380	2,348	1,850	4,198	5.9	...	...	6,618	9.3	59,819	84.3	327	.5	70,964
Bank of Scotland	Feb. 27‖	228	1,500	1,507	3,007	8.0	3,046	8.1	768	2.0	30,747	81.3	237	.6	37,806
Barclays Bank	Dec. 31	1,800+	15,592	9,250	24,842	7.1	...	...	17,175	4.9	305,723	87.8	536	.2	348,278
Baring Bros. & Co	Dec. 31	2	1,025	1,000	2,025	5.3	...	...	10,029	26.1	26,406	68.6	16	..	38,477
Belfast Banking Co	Dec. 31	97	600	600	1,200	6.8	1,049	5.9	...	...	15,381[e]	86.8	91	.5	17,722
Blydenstein & Co., B. W	Dec. 31	1	625	...	625	4.6	...	...	...	...	13,018	95.4	...	..	13,643
British Linen Bank‖	Jan. 15	189	1,250	1,800	3,050	9.0	2,698	7.9	657	1.9	27,501	80.8	135	.4	34,043
British Mutual Banking Co	Dec. 31	1	70[c]	65[b]	135	17.5	...	...	...	...	630	81.1	11	1.4	776
Clydesdale Bank	Dec. 31	189	1,250	1,350	2,600	6.9	2,713	7.1	1,751	4.6	30,566	80.6	292	.8	37,923
Commercial Bank of Scotland	Oct. 31	311	1,750	1,800	3,550	8.3	3,121	7.2	1,075	2.5	35,200	81.6	175	.4	43,122
Cook & Son, (Bankers) Ltd., Thos.	Oct. 31	63	100	70	170	5.6	...	...	53	1.8	2,793	92.6	...	..	3,016
Cooperative Wholesale Soc	Dec. 26	5	‡	297	297	1.0	...	...	...	...	28,825[§]	98.8	41	.2	21,165
Coutts & Co	Dec. 31	3	800	800	1,600	8.6	...	...	...	...	17,083	91.4	...	..	18,684
District Bank	Dec. 31	372	1,896	1,850	3,746	6.2	...	...	2,035	3.4	54,050	89.7	454	.7	60,286
Equitable Bank	Dec. 31	20	100	150	250	14.7	...	...	3	.2	1,426	84	18	1.1	1,698
Glyn, Mills & Co	Dec. 31	3	1,060	530	1,590	4.6	...	...	1,906	5.5	31,200	89.9	...	..	34,697
Grace Bros. & Co., Ltd	Dec. 31	1	1,015	50	1,065	43.9	...	...	696	28.7	665[f]	27.4	...	..	2,426
Grindlay & Co., Ltd	Oct. 31	6	250	...	250	10.3	...	...	29	1.2	2,157	88.5	...	..	2,436
Hibernian Bank	Dec. 31	111	500	590	1,090	7.8	...	...	...	...	12,779	91.8	54	.4	13,924
Hoare & Co., Chas	July 6	1	500	†	500	13.3	...	...	...	...	3,267	86.7	...	..	3,767
Isle of Man Banking Co	Dec. 31	9	30	108	138	5.6	82	3.3	...	...	2,240	90.7	10	.4	2,471
Japhet & Co., Ltd., S	Dec. 31	1	1,000	250	1,250	12.0	...	...	4,849	46.6	4,310	41.4	...	..	10,409
Lancashire and Yorkshire Bank	Dec. 31	148	1,006	1,006	2,013	7.3	16	.1	135	.5	24,990	91.2	250	.9	27,406
Lloyds Bank	Dec. 31	1,700+	14,372	10,000	24,372	6.3	...	...	20,686	5.4	337,178	87.9	1,492	.4	383,730
London Merchant Bank	Dec. 31	1	825	...	825	15.8	...	...	3,224	61.9	1,119	21.5	42	.8	5,212
Manchester and County Bank	Dec. 31	169	1,092	1,025	2,117	9.2	...	...	574	2.5	20,211	87.4	205	.9	23,108
Midland Bank	Dec. 31	1,850+	12,665	12,665	25,330	6.2	...	...	35,747	8.7	348,682	84.7	1,725	.4	411,485
Munster and Leinster Bank	Dec. 31	195	500	1,170	1,670	6.1	...	...	...	...	25,527	93.5	95	0.4	27,293
National Bank	Dec. 31	259	1,500	1,250	2,750	6.3	3,164	7.3	100	.2	37,371	85.7	213	.5	43,599

	Date of Balance Sheet 1925	No of Offices	Paid up Capital	Reserve	Paid up Capital and Reserve		Notes in Circulation		Acceptances, Etc.		Deposits and Current Accounts		Profit Balance		Total Liabilities
			£	£	£	%*	£	%*	£	%*	£	%*	£	%*	£
National Bank of Scotland	Oct. 31	160	1,100	1,350	2,450	6.7	2,446	6.7	313	.9	31,272	85.2	203	.5	36,685
National Land Bank	Dec. 31	7	203	105	308	16.2	...	...	...	...	1,576	82.7	21	1.1	1,907
National Provincial Bank	Dec. 31	1,130+	9,479	9,479	18,958	6.7	...	...	10,025	3.6	252,737	89.4	916	.3	282,638
North of Scotland Bank	Dec. 31	158	1,059	915	1,974	7.9	2,351	9.4	...	...	20,538	82.3	95	.4	24,959
Northern Banking Co	Aug. 31	193	700	800	1,500	8.7	1,569	9.1	159[a]	.9	14,013	81.0	47	.3	17,290
Provincial Bank of Ireland	Dec. 31	131	540	560	1,100	6.2	1,665	9.4	...	...	14,874	84.0	73	.4	17,713
Reliance Bank	Mar. 31	1	60	15	75	15.0	...	...	...	...	414	82.9	10	2.1	500
Royal Bank of Ireland	Aug. 31	73	300	200	500	6.8	...	...	...	...	6,817	92.9	23	.3	7,341
Royal Bank of Scotland	Oct. 10	213	2,500	2,464	4,964	9.9	2,663	5.3	734	1.5	41,605	83.0	160	.3	50,128
Ulster Bank	Nov. 30	210	500	1,000	1,500	6.2	1,779	7.4	...	...	20,787	86.1	73	.3	24,140
Union Bank of Manchester	Dec. 31	166	750	675[d]	1,425	6.9	...	...	917	4.4	18,283	88.6	18	.1	20,644
Union Bank of Scotland	Apr. 1‖	183	1,000	1,350	2,350	7.1	2,626	7.9	751	2.3	27,143	81.8	297	.9	33,168
Westminster Bank	Dec. 31	1,000	9,051	9,051	18,103	5.9	15	...	13,562	4.5	271,379	89.0	1,695	.6	304,756
Williams Deacon's Bank	Dec. 31	189	1,875	1,300	3,175	8.3	...	...	2,359	6.1	32,787	85.2	171	.4	38,493
Yorkshire Penny Bank	Dec. 31	138	750	750	1,500	5.0	...	...	...	...	28,266	95.0	...	..	29,766
Total 46 banks			112,415	86,820	199,236	6.6	181,773	6.0	136,944	4.5	2,490,054	82.5	10,872		3,018,881

[1] Attention is specially called to the percentages in this Table, which do not represent the relation of the individual items to the total liabilities or assets, but to the deposit liabilities, or, in the case of banks having a note circulation, to deposit and note liabilities combined.

* Per cent of Total Liabilities or Assets. † Reserve included with paid-up capital. ‡ The capital (£6,192,341 paid up, including interest, on transferable shares) is not one of the purely banking resources, being liable also for trading commitments. § Including balance (£10,989,507) owing to Trade Department. ‖ 1926.

[a] Endorsements, guarantees and confirmed credits. [b] £30,000 as provision for bad and doubtful debts. [c] Including £10,603 payments in advance. [d] Including £150,000 special contingency fund. [e] Including £1,000,000 on account of Midland Bank for Government of Northern Ireland guaranteed loans account. [f] Including £126,000 installments payable in respect of debentures purchased.

XXIV. 46 Banks of Great Britain and Ireland—Continued

ASSETS:

(In thousands of pounds sterling)

	Cash in Hand and at Bank of England[a]	Cash in Hand and at Bank of England[b]		Money at Call and at Short Notice		Investments		Bills Discounted and Advances				Bank Premises
								Bills Discounted[a]	Advances	Total		
	£	£	%§	£	%§	£	%§	£	£	£	%§	£
Bank of England	144,556[e]	144,556[e]	46.1‖	...	...	83,837	26.7‖	...	103,280	103,280	32.9‖	...
Bank of Ireland	...	4,458	10.2‖	621	1.4‖	29,292	67.1‖	...	14,490	14,490	33.2‖	630
Bank of Liverpool and Martins	7,252	9,693	16.2	4,741	7.9	8,677	14.5	4,315	35,413	39,728	66.4	1,504
Bank of Scotland	3,303	5,378	15.9	2,525	7.5	12,071	35.7	3,042†	13,484	16,526	48.9	535
Barclays Bank	45,672	55,490	18.1	19,864	6.5	65,639	21.5	32,028	153,028	185,057	60.5	5,050
Baring Bros. & Co.	...	10,342	39.2	...	...	1,024	3.9	15,433	1,520	16,953	64.2	127
Belfast Banking Co.	...	1,691	10.3‖	...	...	5,574‡	33.9‖	540	9,863	10,403	63.3‖	53
Blydenstein & Co., B. W.	...	89[d]	.7	...	...	1,415	10.9	11,950†	151	12,102	92.9	35
British Linen Bank	...	7,361	24.4‖	...	...	13,816	45.7‖	...	11,588†	11,588	38.4‖	620
British Mutual Banking Co.	...	113	17.9	...	...	65	10.5	...	594	594	94.3	3
Clydesdale Bank	2,854	5,358	16.1‖	2,319	7.0‖	7,882	23.7‖	4,266†	15,617	19,883	59.7‖	727
Comm. Bank of Scotland	4,266	6,494	16.9‖	3,420	8.9‖	10,977	28.7‖	2,826	17,509	20,335	53.1‖	817
Cook & Son (Bankers) Ltd., Thos.	...	723	25.9	769	27.6	173	6.2	1,075†	168	1,243	44.5	52
Cooperative Wholesale Soc.	...	445	1.5	...	...	15,467	53.7	...	13,233	13,233	45.9	18
Coutts and Co.	1,836	2,635	15.4	1,932	11.3	4,293	25.1	1,279†	8,195	9,475	55.5	346
District Bank	...	7,997	14.8	5,331	9.9	14,565	26.9	4,101†	25,555	29,656	54.9	700
Equitable Bank	...	310	21.8	...	...	576	40.4	62	745	807	56.6	...
Glyn, Mills & Co.	5,621	6,966	22.3	6,086	19.5	8,573	27.5	1,239	9,230	10,469	33.5	695
Grace Bros. & Co., Ltd.	...	387	58.2	33	5.0	341†	51.3	394	475[e]	869[e]	130.7	98
Grindlay & Co., Ltd.	...	176	8.2	145	6.7	1,140†	52.9	...	889	889	41.2	55
Hibernian Bank	...	609	4.8	...	...	5,659	44.3	...	7,466	7,466	58.4	188
Hoare & Co., Chas.	...	594	18.2	435	13.3	1,737	53.2	...	901	901	27.6	100
Isle of Man Banking Co.	...	608	26.2‖	...	...	1,289	55.5‖	...	542	542	23.4‖	30
Japhet & Co., Ltd., S.	...	326	7.6	1,254	29.1	1,019†	23.6	588	2,218	2,806	65.1	153
Lancashire and Yorkshire Bank	...	5,211	20.8‖	...	...	7,719	30.9‖	3,217†	10,672	13,889	55.5‖	450
Lloyds Bank	39,401	51,548	15.3	20,507	6.1	60,303	17.9	41,624	183,330	224,954	66.7	5,729
London Merchant Bank	...	65	5.8	735	65.6	158	14.2	281	704	986	88.1	42
Manchester and County Bank	...	3,978	19.7	...	...	4,065	20.1	1,071	13,017	14,089	69.7	400

	Cash in Hand and at Bank of England[a]	Cash in Hand and at Bank of England[b]		Money at Call and at Short Notice		Investments		Bills Discounted and Advances				Bank Premises
								Bills Discounted[a]	Advances	Total		
	£	£	%§	£	%§	£	%§	£	£	£	%§	£
Midland Bank	53,590	70,616	20.3	18,679	5.4	41,169	11.8	41,888	196,747	238,635	68.4	6,637
Munster and Leinster Bank	...	1,959	7.7	802	3.1	9,521	37.3	1,724	12,944	14,668	57.5	340
National Bank	...	4,072	10.1‖	4,183†	10.3‖	15,435	38.1‖	2,700	16,321	19,022	46.9‖	785
National Bank of Scotland	...	3,272	9.7‖	4,229	12.5‖	11,889	35.3‖	2,930	13,457	16,388	48.6‖	592
National Land Bank	...	490	31.1	...	...	424	26.9	48	876	924	58.6	67
National Provincial Bank	28,472	38,188	15.1	18,358	7.2	42,115	16.7	35,880†	133,617	169,498	67.1	4,452
North of Scotland Bank	...	3,210	14.0‖	...	...‖	10,838	47.4‖	436	10,302	10,738	46.9‖	172
Northern Banking Co.	...	1,850	11.9‖	...	...	4,116	26.4‖	...	10,869	10,869	69.7‖	294
Provincial Bank of Ireland	...	1,301	5.9‖	245	1.5‖	7,018	42.4‖	2,915	6,032	8,947	54.1‖	200
Reliance Bank	...	105	25.5	...	...	259	62.6	...	134	134	32.5‖	...
Royal Bank of Ireland	...	391	5.8	...	...	2,040	29.9	347	4,336	4,684	68.7	225
Royal Bank of Scotland	...	4,731	10.7‖	5,722	12.9‖	15,147	34.2‖	4,202†	18,626	22,828	51.6‖	963
Ulster Bank	...	2,414	10.7‖	...	...	10,256	44.5‖	...	11,269	11,269	49.9‖	200
Union Bank of Manchester	...	2,608	14.3	...	...	2,659	14.5	1,010	13,047	14,058	76.9	400
Union Bank of Scotland	...	3,004	10.1‖	3,311	11.1‖	12,580	42.3‖	3,259†	9,758	13,017	43.7‖	502
Westminster Bank	31,687	42,343	15.6‖	28,301	10.4‖	49,930	18.4‖	39,999	126,516	166,515	61.4‖	4,102
Williams Deacon's Bank	4,071	5,543	16.9	2,985	9.1	4,745	14.5	3,713	18,295	22,008	67.1	851
Yorkshire Penny Bank	...	7,849	27.8	...	...	17,620	62.3	730†	3,016	3,746	13.3	549
Totals, 46 Banks	372,586	527,571	19.7‖	157,541	5.9‖	625,129	23.4‖	271,128	1,260,060	1,531,188	57.3‖	40,505

† Including Treasury Bills. ‡ Including £1,000,000 of Government guaranteed loans held for Midland Bank (see contra). § Per cent of deposit liabilities, except where otherwise indicated. ‖ Per cent of Deposit and Note Liabilities.

[a] Where shown separately. [b] Balances with, and cheques in course of collection on, other banks in Great Britain and Ireland—shown separately by the London Clearing Banks and some others—are included. [c] Including £123,480 due in respect of debentures sold. [d] Including £10,467 balances at bankers abroad. [e] Wholly gold (coin and bullion) and silver coin.

[*The Statist*, British Banking Section, May 29, 1926, p. 870, by permission.]

XXV. SOURCES OF FOREIGN CREDIT INFORMATION

It is suggested to the student of foreign banking and credits that he investigate the organization, services, and character of the information on foreign credit afforded by the following:

I. Mercantile Agencies:
- R. G. Dun & Co., 290 Broadway, New York City
- The Bradstreet Company, 346 Broadway, New York City
- National Credit Office, 45 East 17th St., New York City
- Philadelphia Commercial Museum, Philadelphia, Pa.
- The Credit and Audit Company of America, 24 Bank Street, New York City

II. Cooperative Organizations:
- Foreign Credit Interchange Bureau; National Association of Credit Men, 1 Park Ave., New York City
- National Association of Manufacturers, 50 Church St., New York City
- American Manufacturers' Export Association, 233 Broadway, New York City
- Motor and Accessory Manufacturers' Association, 250 West 57th St., New York City
- American Manufacturers' Foreign Credit Underwriters, Inc., 318 Fourth Ave., New York City

III. Export Journals Maintaining Credit Service Departments:
- Importers' Guide, 461 Eighth Ave., New York City
- La Hacienda, Buffalo, New York
- American Exporter, 370 Seventh Ave., New York City
- The American Automobile, 239 West 39th St., New York City

IV. Banks and Service Organizations Maintaining Credit Files:
- National banks and trust companies in New York, Chicago, Philadelphia, Boston, etc.
- Branches of foreign banks in America
- American Express Co., 65 Broadway, New York City

V. Trade Organizations:
- International Trade Developer, Inc., 247 Park Ave., New York City
- Business Publishers' International Corporation, 225 West 34th St., New York City
- Perry's Trade Protection Office (W. R. Perry, Ltd., 1776), 12 Coleman St., London
- Seyd & Co.'s Banking and Credit Agency, 38 Lombard St., London

The student will find Trade Information Bulletin, No. 292, "Source of Foreign Credit Information," U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce, very useful in the study of this subject.

XXVI. LIST OF FINANCIAL AND STATISTICAL SERVICES

Associations of Italian Corporations. Business and financial reports. Italian Embassy, Washington, D. C.

Babson Statistical Organization. Barometer letter, reports. Wellesley Hills, Mass.

Bankers' Economic Service. Review of the week. 45 West 45th St., New York City.

Barrons. National financial weekly. Boston, Mass.

Brookmire's Economic Service, Inc. Analyst, forecaster, trade bulletin, sales and credit map. 570 Seventh Ave., New York City.

Brown University. Business service. Providence, R. I.

Bureau of Business Conditions, Alexander Hamilton Institute. Business conditions, trade bulletin, investment bulletin. 810 South Spring St., New York City.
Eberle & Riggleman, Inc. Economic service. Los Angeles, Calif.
Franklin Statistical Corporation. Statistical service. 46 West St., New York City.
Harvard University, Committee on Economic Research. Letter, review of economic statistics. Cambridge, Mass.
Irving Fisher. Index numbers. 460 Prospect St., New Haven, Conn.
Moody's Investors Service. Investment letters. 35 Nassau St., New York City.
Standard Statistics Company. Trade and securities service. 47–49 West St., New York City.
Thomas Gibson. Letters, forecasts. 53 Park Place, New York City.
The American Institute of Finance. Investment and speculative bulletin. 141 Milk St., Boston, Mass.

XXVII. LIST OF BANKS PUBLISHING AVAILABLE REPORTS AND BULLETINS

American Exchange-Irving Bank. Monthly letter. New York City.
Anglo-South American Bank, Ltd. Cable Report Circulars. Old Broad St., London, E. C. 2.
Bank of Finland. Monthly bulletin. Helsingfors.
Bank of Liverpool and Martin's. Monthly circular. Liverpool.
Bank of Montreal. Business summary. Montreal, Canada.
Barclays Bank. Monthly Review. London, England.
Chase National Bank. Economic Bulletin. New York City.
Cleveland Trust Co. Business bulletin. Cleveland, Ohio.
Continental & Com. Natl. Bk. Trend of business. Chicago, Ill.
Deutsche Bank. Monthly review. Berlin.
Ernesto Tornquist & Co. Circular mensual. Buenos Aires.
First National Bank. New England letter. Boston, Mass.
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First National Bank. Bulletin. St. Louis, Mo.
Guaranty Trust. Co. Monthly bulletin. New York City.
Midland Bank. Monthly review. London, England.
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Annual Reports Director of the Mint, Government Printing Office, Washington, D. C.
Annual Reports U. S. Treasurer, Government Printing Office, Washington, D. C.
Annual Reports War Finance Corporation, Government Printing Office, Washington, D. C.

Annual Reports Federal Farm Loan Board, Government Printing Office, Washington, D. C.
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Digest of Decisions Relating to National Banks, Government Printing Office, Washington, D. C.
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Instructions of Comptroller in Relation to Organization of National Banks, Office Comptroller Currency, Washington, D. C.
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Reports Postal Savings System, Postmaster General, Washington, D. C.
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(b) Economic and Financial Periodicals

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American Banker, New York City.
American Bankers Association Journal, New York City.
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